

Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 304753 Report

This analysis was run 06/08/26 on database version 649.

Pham number 304753 has 167 members, 30 are drafts.

Phages represented in each track:

- Track 1 : AikoCarson_15
- Track 2 : Agatha_16
- Track 3 : Bavidard_16
- Track 4 : McDazzle_15, ElJefes_15
- Track 5 : Nodigi_18
- Track 6 : Cozz_16
- Track 7 : Quasar_16
- Track 8 : ChocoMunchkin_16, AndPeggy_15, Yarn_15, CanesSauce_16, Caramellatte_16
- Track 9 : Elliott_16, PsychoKiller_16
- Track 10 : Wolfwood_18
- Track 11 : SteamedHams_18
- Track 12 : Malvina_18
- Track 13 : Feastonyeet_15, BigChungus_15
- Track 14 : Amok_15
- Track 15 : Mayweather_17
- Track 16 : Wallaby_20
- Track 17 : GiKK_19
- Track 18 : CocoaPuff_15
- Track 19 : Bubble_16
- Track 20 : Vine_17
- Track 21 : Elinal_17, KayGee_16
- Track 22 : SweatNTears_18
- Track 23 : Nina_17
- Track 24 : Orla_18
- Track 25 : CherryonLim_17
- Track 26 : Lauer_15
- Track 27 : Buttrmilkdreams_16
- Track 28 : Yummy_17, Horseradish_17
- Track 29 : Tolls_18
- Track 30 : RSchmailzl_17
- Track 31 : Dre3_16, Gibbous_16
- Track 32 : Hexbug_18
- Track 33 : ChickenTender_18
- Track 34 : SheckWes_15
- Track 35 : Zareef_18
- Track 36 : Jamzy_19

- Track 37 : Carsonalex_17
- Track 38 : Tarnish_16
- Track 39 : Balloona_15
- Track 40 : Starburst_17
- Track 41 : Biskit_17, SketchMex_15
- Track 42 : Survivors_18
- Track 43 : Button_17
- Track 44 : RanchParmCat_19
- Track 45 : GoldHunter_17
- Track 46 : SummitAcademy_15
- Track 47 : PotPie_16
- Track 48 : MunkgeeRoachy_16
- Track 49 : HippoPololi_18
- Track 50 : MAnor_16
- Track 51 : Cleo_16
- Track 52 : Typhonomachy_16
- Track 53 : Nibbles_18
- Track 54 : Sopespian_16
- Track 55 : Troje_16
- Track 56 : RADical_17
- Track 57 : RedBaron_18
- Track 58 : Pons_16
- Track 59 : Yucky_16
- Track 60 : Socotra_17, Axym_16
- Track 61 : BillDoor_18
- Track 62 : MaVan_18
- Track 63 : MScarn_18
- Track 64 : Emalyn_15
- Track 65 : GTE2_14
- Track 66 : Margaret_19
- Track 67 : Burnsey_16
- Track 68 : Azira_18
- Track 69 : Blondies_17
- Track 70 : Fribs8_17
- Track 71 : PhrostedPhlake_18
- Track 72 : Wocket_18
- Track 73 : Malachai_18, Begonia_18
- Track 74 : Murp_17
- Track 75 : MintFen_17, Melba_17, BlingBling_17, Barco_17
- Track 76 : CaptainKirk2_17, Delian_17, UmaThurman_17
- Track 77 : Pipp_17
- Track 78 : Wisp_16
- Track 79 : Mellie_16
- Track 80 : Gambino_19, Blueberry_19, Azula_19, MissRona_19
- Track 81 : Frokostdame_17
- Track 82 : Petra_19
- Track 83 : ZiggyZoo_16, Obliviate_16
- Track 84 : Samba_17
- Track 85 : PrincePatrick_17
- Track 86 : CarolAnn_17, Soilmate_17
- Track 87 : Walrus_18
- Track 88 : Blino_17
- Track 89 : William_17

- Track 90 : CheeseSpider_20
- Track 91 : Hitter_17
- Track 92 : Jalammah_19
- Track 93 : Guacamole_17, JasperJr_17
- Track 94 : Zilla_17
- Track 95 : Fenry_16
- Track 96 : KappaFarmDelta_17
- Track 97 : JuJu_17
- Track 98 : Lysidious_18
- Track 99 : Utz_17
- Track 100 : Archis_18
- Track 101 : PCoral7_17
- Track 102 : Zarbodnamra_17
- Track 103 : Fairfaxidum_17
- Track 104 : Toast_17
- Track 105 : Bowser_17
- Track 106 : BackstagePass_17
- Track 107 : Eyes_17
- Track 108 : GEazy_17, HannahD_17, NaLuna_17
- Track 109 : BBQValindra_17
- Track 110 : Kiko_18
- Track 111 : TaronosaurusRx_17
- Track 112 : Schnabeltier_17, MagicMan_17
- Track 113 : ZAYM_17
- Track 114 : Jecs_18
- Track 115 : DirtyBoi_18
- Track 116 : Opie_17
- Track 117 : Bunker_17
- Track 118 : Hedwig_18
- Track 119 : BotCity_18, BENtherdunthat_18, Asapag_18
- Track 120 : Budski_18
- Track 121 : Malisha_19
- Track 122 : Periwinkle_20
- Track 123 : Lutum_18, Kenna_17
- Track 124 : Whitney_19
- Track 125 : CheeseTouch_18
- Track 126 : Leroy_18
- Track 127 : Horus_18
- Track 128 : Getalong_19
- Track 129 : LitninMcQueen_18, Phabuloso_18
- Track 130 : ShawBrad_18
- Track 131 : Frickyeah_18
- Track 132 : Kamaru_18, Holliday_18
- Track 133 : Phistory_19
- Track 134 : Spooky_18
- Track 135 : Squiddly_20

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 4, it was called in 38 of the 137 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Archis_18, Azula_19, Barco_17, Begonia_18, BlingBling_17, Blino_17, Blueberry_19, CaptainKirk2_17, CarolAnn_17, Delian_17, Fairfaxidum_17, Fenry_16, Gambino_19, Guacamole_17, Hitter_17, Jalammah_19, JasperJr_17, JuJu_17, KappaFarmDelta_17, Lysidious_18, Malachai_18, Melba_17, Mellie_16, MintFen_17, MissRona_19, Murp_17, Obliviate_16, PCoral7_17, PhrostedPhlake_18, PrincePatrick_17, Samba_17, Soilmate_17, UmaThurman_17, Utz_17, William_17, Wocket_18, Zarbodnamra_17, ZiggyZoo_16, Zilla_17,

Genes that have the "Most Annotated" start but do not call it:

- CheeseSpider_20, Frokostdame_17, Petra_19, Pipp_17, Toast_17, Walrus_18, Wisp_16,

Genes that do not have the "Most Annotated" start:

- Agatha_16, AikoCarson_15, Amok_15, AndPeggy_15, Asapag_18, Axym_16, Azira_18, BBQValindra_17, BENtherdunthat_18, BackstagePass_17, Balloona_15, Bavailard_16, BigChungus_15, BillDoor_18, Biskit_17, Blondies_17, BotCity_18, Bowser_17, Bubble_16, Budski_18, Bunker_17, Burnsey_16, Button_17, Buttrmlkdreams_16, CanesSauce_16, CaramelLatte_16, Carsonalex_17, CheeseTouch_18, CherryonLim_17, ChickenTender_18, ChocoMunchkin_16, Cleo_16, CocoaPuff_15, Cozz_16, DirtyBoi_18, Dre3_16, ElJefes_15, Elinal_17, Elliott_16, Emalyn_15, Eyes_17, Feastonyeet_15, Fribs8_17, Frickyeah_18, GEazy_17, GTE2_14, Getalong_19, GiKK_19, Gibbous_16, GoldHunter_17, HannahD_17, Hedwig_18, Hexbug_18, HippoPololi_18, Holliday_18, Horseradish_17, Horus_18, Jamzy_19, Jecs_18, Kamaru_18, KayGee_16, Kenna_17, Kiko_18, Lauer_15, Leroy_18, LitninMcQueen_18, Lutum_18, MAnor_16, MScarn_18, MaVan_18, MagicMan_17, Malisha_19, Malvina_18, Margaret_19, Mayweather_17, McDazzle_15, MunkgeeRoachy_16, NaLuna_17, Nibbles_18, Nina_17, Nodigi_18, Opie_17, Orla_18, Periwinkle_20, Phabuloso_18, Phistory_19, Pons_16, PotPie_16, PsychoKiller_16, Quasar_16, RADical_17, RSchmailzl_17, RanchParmCat_19, RedBaron_18, Schnabeltier_17, ShawBrad_18, SheckWes_15, SketchMex_15, Socotra_17, Sopespian_16, Spooky_18, Squiddly_20, Starburst_17, SteamedHams_18, SummitAcademy_15, Survivors_18, SweatNTears_18, Tarnish_16, TaronosaurusRx_17, Tolls_18, Troje_16, Typhonmarchy_16, Vine_17, Wallaby_20, Whitney_19, Wolfwood_18, Yarn_15, Yucky_16, Yummy_17, ZAYM_17, Zareef_18,

Summary by start number:

Start 2:

- Found in 1 of 167 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 137
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pipp_17 (CV),

Start 3:

- Found in 5 of 167 (3.0%) of genes in pham
- Manual Annotations of this start: 1 of 137
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Toast_17 (CV),

Start 4:

- Found in 46 of 167 (27.5%) of genes in pham
- Manual Annotations of this start: 38 of 137
- Called 84.8% of time when present
- Phage (with cluster) where this start called: Archis_18 (CV), Azula_19 (CV), Barco_17 (CV), Begonia_18 (CV), BlingBling_17 (CV), Blino_17 (CV), Blueberry_19 (CV), CaptainKirk2_17 (CV), CarolAnn_17 (CV), Delian_17 (CV), Fairfaxidum_17 (CV), Fenry_16 (CV), Gambino_19 (CV), Guacamole_17 (CV), Hitter_17 (CV), Jalammah_19 (CV), JasperJr_17 (CV), JuJu_17 (CV), KappaFarmDelta_17 (CV), Lysidious_18 (CV), Malachai_18 (CV), Melba_17 (CV), Mellie_16 (CV), MintFen_17 (CV), MissRona_19 (CV), Murp_17 (CV), Obliviate_16 (CV), PCoral7_17 (CV), PhrostedPhlake_18 (CV), PrincePatrick_17 (CV), Samba_17 (CV), Soilmate_17 (CV), UmaThurman_17 (CV), Utz_17 (CV), William_17 (CV), Wocket_18 (CV), Zarbodnamra_17 (CV), ZiggyZoo_16 (CV), Zilla_17 (CV),

Start 6:

- Found in 37 of 167 (22.2%) of genes in pham
- Manual Annotations of this start: 1 of 137
- Called 2.7% of time when present
- Phage (with cluster) where this start called: Frokostdame_17 (CV),

Start 7:

- Found in 37 of 167 (22.2%) of genes in pham
- Manual Annotations of this start: 1 of 137
- Called 2.7% of time when present
- Phage (with cluster) where this start called: Walrus_18 (CV),

Start 9:

- Found in 41 of 167 (24.6%) of genes in pham
- Manual Annotations of this start: 1 of 137
- Called 7.3% of time when present
- Phage (with cluster) where this start called: CheeseSpider_20 (CV), Petra_19 (CV), Wisp_16 (CV),

Start 14:

- Found in 1 of 167 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 137
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phistory_19 (DN1),

Start 15:

- Found in 1 of 167 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 137
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Periwinkle_20 (DN1),

Start 16:

- Found in 15 of 167 (9.0%) of genes in pham
- Manual Annotations of this start: 11 of 137
- Called 73.3% of time when present
- Phage (with cluster) where this start called: Asapag_18 (DN1), BENtherdunthat_18 (DN1), BotCity_18 (DN), CheeseTouch_18 (DN1), Holliday_18 (DN1), Kamaru_18

(DN1), Kenna_17 (DN1), Leroy_18 (DN1), LitninMcQueen_18 (DN1), Lutum_18 (DN1), Phabuloso_18 (DN1),

Start 17:

- Found in 24 of 167 (14.4%) of genes in pham
- Manual Annotations of this start: 5 of 137
- Called 20.8% of time when present
- Phage (with cluster) where this start called: Getalong_19 (DN1), Malisha_19 (DN), Spooky_18 (DN2), Squiddly_20 (DN2), Whitney_19 (DN1),

Start 20:

- Found in 17 of 167 (10.2%) of genes in pham
- Manual Annotations of this start: 13 of 137
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BBQValindra_17 (DB), BackstagePass_17 (DB), Bowser_17 (DB), Bunker_17 (DB), DirtyBoi_18 (DB), Eyes_17 (DB), GEazy_17 (DB), HannahD_17 (DB), Hedwig_18 (DB), Jecs_18 (DB), Kiko_18 (DB), MagicMan_17 (DB), NaLuna_17 (DB), Opie_17 (DB), Schnabeltier_17 (DB), TaronosaurusRx_17 (DB), ZAYM_17 (DB),

Start 23:

- Found in 65 of 167 (38.9%) of genes in pham
- Manual Annotations of this start: 36 of 137
- Called 76.9% of time when present
- Phage (with cluster) where this start called: Agatha_16 (CT), Axym_16 (CT), Azira_18 (CT), Bavidard_16 (CT), BigChungus_15 (CT), Bubble_16 (CT), Burnsey_16 (CT), Carsonalex_17 (CT), CherryonLim_17 (CT), ChickenTender_18 (CT), Cleo_16 (CT), CocoaPuff_15 (CT), Cozz_16 (CT), Dre3_16 (CT), Elinal_17 (CT), Elliott_16 (CT), Feastonyeet_15 (CT), Fribs8_17 (CT), Gibbous_16 (CT), GoldHunter_17 (CT), HippoPololi_18 (CT), KayGee_16 (CT), Lauer_15 (CT), MAnor_16 (CT), MaVan_18 (CT), Malvina_18 (CT), Mayweather_17 (CT), MunkgeeRoachy_16 (CT), Nibbles_18 (CT), Nina_17 (CT), Pons_16 (CT), PotPie_16 (CT), PsychoKiller_16 (CT), Quasar_16 (CT), RADical_17 (CT), RSchmailzl_17 (CT), RedBaron_18 (CT), SheckWes_15 (CT), Socotra_17 (CT), Sopespian_16 (CT), Starburst_17 (CT), SummitAcademy_15 (CT), Survivors_18 (CT), Tarnish_16 (CT), Typhonmarchy_16 (CT), Vine_17 (CT), Wallaby_20 (CT), Wolfwood_18 (CT), Yucky_16 (CT), Zareef_18 (CT),

Start 26:

- Found in 24 of 167 (14.4%) of genes in pham
- Manual Annotations of this start: 1 of 137
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Frickyeah_18 (DN1), Horus_18 (DN1), ShawBrad_18 (DN1),

Start 37:

- Found in 20 of 167 (12.0%) of genes in pham
- Manual Annotations of this start: 1 of 137
- Called 5.0% of time when present
- Phage (with cluster) where this start called: Budski_18 (DN),

Start 40:

- Found in 54 of 167 (32.3%) of genes in pham

- No Manual Annotations of this start.
- Called 5.6% of time when present
- Phage (with cluster) where this start called: Balloona_15 (CT), ElJefes_15 (CT), McDazzle_15 (CT),

Start 72:

- Found in 8 of 167 (4.8%) of genes in pham
- Manual Annotations of this start: 7 of 137
- Called 87.5% of time when present
- Phage (with cluster) where this start called: GiKK_19 (CT), Hexbug_18 (CT), Jamzy_19 (CT), Margaret_19 (CT), Nodigi_18 (CT), Orla_18 (CT), RanchParmCat_19 (CT),

Start 74:

- Found in 21 of 167 (12.6%) of genes in pham
- Manual Annotations of this start: 16 of 137
- Called 90.5% of time when present
- Phage (with cluster) where this start called: AikoCarson_15 (CT), Amok_15 (CT), AndPeggy_15 (CT), BillDoor_18 (CT), Biskit_17 (CT), Buttrmlkdreams_16 (CT), CanesSauce_16 (CT), CaramelLatte_16 (CT), ChocoMunchkin_16 (CT), Emalyn_15 (CT), Horseradish_17 (CT), MScarn_18 (CT), SketchMex_15 (CT), SteamedHams_18 (CT), SweatNTears_18 (CT), Tolls_18 (CT), Troje_16 (CT), Yarn_15 (CT), Yummy_17 (CT),

Start 78:

- Found in 8 of 167 (4.8%) of genes in pham
- Manual Annotations of this start: 1 of 137
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Button_17 (CT),

Start 81:

- Found in 20 of 167 (12.0%) of genes in pham
- Manual Annotations of this start: 1 of 137
- Called 5.0% of time when present
- Phage (with cluster) where this start called: Blondies_17 (CT),

Start 106:

- Found in 21 of 167 (12.6%) of genes in pham
- No Manual Annotations of this start.
- Called 4.8% of time when present
- Phage (with cluster) where this start called: GTE2_14 (CT),

Summary by clusters:

There are 6 clusters represented in this pham: DN, DB, DN1, DN2, CV, CT,

Info for manual annotations of cluster CT:

- Start number 23 was manually annotated 36 times for cluster CT.
- Start number 72 was manually annotated 7 times for cluster CT.
- Start number 74 was manually annotated 16 times for cluster CT.
- Start number 78 was manually annotated 1 time for cluster CT.
- Start number 81 was manually annotated 1 time for cluster CT.

Info for manual annotations of cluster CV:

- Start number 2 was manually annotated 1 time for cluster CV.
- Start number 3 was manually annotated 1 time for cluster CV.
- Start number 4 was manually annotated 38 times for cluster CV.
- Start number 6 was manually annotated 1 time for cluster CV.
- Start number 7 was manually annotated 1 time for cluster CV.
- Start number 9 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster DB:

- Start number 20 was manually annotated 13 times for cluster DB.

Info for manual annotations of cluster DN:

- Start number 16 was manually annotated 1 time for cluster DN.
- Start number 17 was manually annotated 1 time for cluster DN.
- Start number 37 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 14 was manually annotated 1 time for cluster DN1.
- Start number 15 was manually annotated 1 time for cluster DN1.
- Start number 16 was manually annotated 10 times for cluster DN1.
- Start number 17 was manually annotated 2 times for cluster DN1.
- Start number 26 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 17 was manually annotated 2 times for cluster DN2.

Gene Information:

Gene: Agatha_16 Start: 9629, Stop: 14767, Start Num: 23

Candidate Starts for Agatha_16:

(Start: 17 @9605 has 5 MA's), (Start: 23 @9629 has 36 MA's), (27, 9656), (40, 9785), (43, 9860), (68, 10013), (69, 10016), (87, 10112), (90, 10121), (96, 10151), (98, 10157), (100, 10172), (101, 10175), (105, 10196), (114, 10268), (116, 10289), (126, 10355), (129, 10376), (143, 10493), (170, 10655), (178, 10694), (187, 10769), (201, 10928), (206, 10940), (209, 10967), (214, 11012), (216, 11024), (229, 11114), (231, 11132), (234, 11153), (237, 11183), (243, 11207), (246, 11219), (249, 11258), (253, 11291), (269, 11393), (270, 11396), (274, 11420), (285, 11513), (287, 11528), (291, 11567), (303, 11663), (312, 11705), (319, 11735), (320, 11738), (330, 11846), (331, 11849), (336, 11900), (350, 11975), (361, 12077), (370, 12122), (375, 12143), (376, 12146), (377, 12149), (393, 12224), (401, 12257), (404, 12278), (408, 12308), (415, 12356), (416, 12362), (420, 12389), (440, 12524), (456, 12641), (459, 12674), (460, 12695), (461, 12698), (474, 12764), (475, 12770), (477, 12785), (497, 12905), (499, 12914), (511, 12998), (567, 13319), (602, 13538), (608, 13574), (639, 13787), (673, 13979), (681, 14027), (685, 14048), (699, 14156), (711, 14222), (713, 14240), (725, 14345), (732, 14375), (733, 14384), (738, 14414), (749, 14480), (753, 14528), (760, 14588), (770, 14675), (779, 14738),

Gene: AikoCarson_15 Start: 9357, Stop: 14072, Start Num: 74

Candidate Starts for AikoCarson_15:

(Start: 74 @9357 has 16 MA's), (Start: 81 @9384 has 1 MA's), (106, 9513), (117, 9600), (120, 9615), (125, 9660), (128, 9672), (130, 9690), (132, 9717), (142, 9789), (144, 9831), (147, 9846), (149, 9849), (154, 9873), (157, 9891), (161, 9909), (168, 9954), (169, 9963), (176, 9990), (180, 10023), (190, 10083), (194, 10122), (195, 10161), (197, 10176), (209, 10245), (213, 10272), (227, 10368), (230,

10386), (240, 10449), (268, 10617), (269, 10623), (283, 10737), (285, 10743), (287, 10758), (316, 10947), (320, 10968), (323, 10986), (324, 10995), (336, 11130), (350, 11205), (352, 11241), (357, 11280), (358, 11283), (361, 11307), (366, 11337), (370, 11352), (376, 11376), (386, 11415), (393, 11454), (395, 11460), (420, 11619), (455, 11868), (456, 11871), (459, 11904), (460, 11925), (474, 11994), (475, 12000), (487, 12099), (499, 12144), (511, 12231), (539, 12366), (567, 12558), (578, 12627), (583, 12651), (606, 12792), (636, 13005), (639, 13026), (647, 13083), (693, 13386), (697, 13443), (699, 13461), (711, 13527), (718, 13599), (725, 13650), (731, 13674), (732, 13680), (733, 13689), (738, 13719), (749, 13785), (753, 13833), (760, 13893), (771, 13983), (779, 14043),

Gene: Amok_15 Start: 9357, Stop: 14069, Start Num: 74

Candidate Starts for Amok_15:

(Start: 74 @9357 has 16 MA's), (Start: 81 @9384 has 1 MA's), (106, 9513), (117, 9600), (120, 9615), (125, 9660), (128, 9672), (130, 9690), (132, 9717), (142, 9789), (144, 9831), (147, 9846), (149, 9849), (154, 9873), (157, 9891), (161, 9909), (165, 9930), (168, 9954), (169, 9963), (176, 9990), (180, 10023), (181, 10032), (194, 10122), (195, 10161), (197, 10176), (209, 10245), (213, 10272), (227, 10368), (230, 10386), (240, 10449), (268, 10617), (269, 10623), (283, 10737), (285, 10743), (287, 10758), (316, 10947), (320, 10968), (323, 10986), (324, 10995), (336, 11130), (345, 11184), (350, 11205), (352, 11241), (357, 11280), (358, 11283), (361, 11307), (366, 11337), (370, 11352), (376, 11376), (386, 11415), (393, 11454), (395, 11460), (415, 11586), (419, 11616), (420, 11619), (422, 11637), (423, 11640), (455, 11868), (456, 11871), (459, 11904), (460, 11925), (474, 11994), (475, 12000), (511, 12231), (539, 12366), (567, 12558), (578, 12627), (583, 12651), (606, 12792), (636, 13005), (639, 13026), (647, 13080), (693, 13383), (697, 13440), (699, 13458), (711, 13524), (718, 13596), (725, 13647), (732, 13677), (733, 13686), (738, 13716), (749, 13782), (753, 13830), (760, 13890), (771, 13980), (779, 14040),

Gene: AndPeggy_15 Start: 9645, Stop: 14432, Start Num: 74

Candidate Starts for AndPeggy_15:

(Start: 74 @9645 has 16 MA's), (Start: 81 @9672 has 1 MA's), (94, 9750), (106, 9801), (117, 9888), (120, 9903), (128, 9960), (130, 9978), (132, 10005), (134, 10008), (142, 10077), (147, 10134), (157, 10179), (161, 10197), (168, 10242), (176, 10278), (180, 10311), (188, 10359), (189, 10362), (194, 10410), (195, 10449), (197, 10464), (227, 10656), (230, 10674), (244, 10758), (268, 10905), (273, 10932), (283, 11025), (285, 11031), (287, 11046), (291, 11085), (292, 11097), (301, 11163), (316, 11235), (319, 11253), (320, 11256), (324, 11283), (352, 11529), (361, 11595), (370, 11640), (375, 11661), (376, 11664), (377, 11667), (386, 11703), (393, 11742), (395, 11748), (401, 11775), (419, 11904), (420, 11907), (422, 11925), (441, 12048), (443, 12063), (459, 12192), (460, 12213), (468, 12255), (474, 12282), (475, 12288), (495, 12420), (499, 12432), (511, 12519), (519, 12561), (529, 12597), (552, 12723), (557, 12762), (575, 12891), (585, 12948), (592, 12990), (606, 13083), (613, 13158), (624, 13221), (636, 13302), (639, 13323), (662, 13500), (663, 13506), (689, 13725), (697, 13803), (699, 13821), (701, 13827), (711, 13887), (713, 13905), (716, 13938), (725, 14010), (733, 14049), (738, 14079), (749, 14145), (753, 14193), (760, 14253), (771, 14343), (779, 14403),

Gene: Archis_18 Start: 10485, Stop: 16007, Start Num: 4

Candidate Starts for Archis_18:

(Start: 4 @10485 has 38 MA's), (Start: 6 @10500 has 1 MA's), (Start: 7 @10506 has 1 MA's), (Start: 9 @10536 has 1 MA's), (10, 10545), (11, 10548), (13, 10590), (33, 10701), (35, 10722), (41, 10842), (46, 10884), (56, 10950), (59, 10968), (63, 10989), (64, 10992), (67, 11010), (73, 11034), (88, 11118), (90, 11124), (98, 11160), (100, 11175), (102, 11184), (124, 11352), (129, 11379), (143, 11496), (173, 11667), (178, 11697), (198, 11901), (206, 11946), (209, 11973), (210, 11985), (224, 12075), (229, 12120), (233, 12147), (236, 12177), (249, 12264), (250, 12267), (254, 12306), (267, 12390), (274, 12426), (278, 12468), (283, 12513), (285, 12519), (286, 12531), (287, 12534), (293, 12588), (298, 12627), (300, 12648), (301, 12651), (303, 12669), (304, 12678), (309, 12696), (314, 12717), (316, 12723), (320, 12744), (324, 12771), (329, 12849), (369, 13038), (378, 13062), (384, 13074), (385, 13077), (397, 13092), (400, 13107), (401, 13110), (408, 13161), (419, 13242), (420, 13245), (426,

13278), (429, 13308), (431, 13332), (478, 13665), (486, 13713), (489, 13758), (490, 13761), (492, 13776), (501, 13821), (502, 13830), (503, 13839), (510, 13890), (523, 13962), (528, 13980), (536, 14001), (545, 14100), (546, 14103), (553, 14136), (561, 14202), (562, 14220), (564, 14235), (569, 14268), (577, 14319), (586, 14370), (591, 14418), (617, 14613), (618, 14616), (629, 14688), (630, 14691), (638, 14757), (639, 14760), (641, 14778), (649, 14838), (656, 14895), (657, 14913), (666, 14994), (667, 14997), (670, 15012), (686, 15171), (696, 15225), (700, 15291), (709, 15345), (710, 15357), (711, 15363), (715, 15393), (725, 15486), (731, 15510), (735, 15528), (738, 15552), (739, 15558), (742, 15579), (749, 15618), (762, 15759), (772, 15822), (774, 15840), (780, 15897), (789, 15990),

Gene: Asapag_18 Start: 9881, Stop: 15508, Start Num: 16

Candidate Starts for Asapag_18:

(Start: 16 @9881 has 11 MA's), (Start: 26 @9926 has 1 MA's), (28, 9947), (32, 9968), (36, 10013), (Start: 37 @10028 has 1 MA's), (42, 10112), (48, 10154), (49, 10166), (59, 10229), (62, 10244), (64, 10253), (67, 10271), (68, 10277), (80, 10325), (105, 10460), (123, 10610), (129, 10640), (178, 10964), (191, 11060), (198, 11168), (205, 11210), (206, 11213), (207, 11219), (209, 11240), (220, 11321), (229, 11387), (233, 11414), (234, 11426), (236, 11444), (237, 11456), (243, 11480), (246, 11492), (249, 11531), (250, 11534), (251, 11543), (254, 11573), (271, 11678), (274, 11693), (277, 11723), (278, 11735), (283, 11780), (285, 11786), (287, 11801), (290, 11831), (292, 11852), (293, 11855), (301, 11918), (304, 11945), (305, 11948), (306, 11951), (307, 11957), (313, 11981), (314, 11984), (316, 11990), (318, 11996), (320, 12011), (323, 12029), (325, 12074), (334, 12158), (335, 12164), (339, 12191), (352, 12284), (353, 12293), (361, 12350), (362, 12362), (371, 12398), (372, 12404), (384, 12446), (386, 12458), (393, 12497), (395, 12503), (396, 12506), (399, 12524), (400, 12527), (401, 12530), (405, 12554), (415, 12629), (421, 12668), (425, 12692), (429, 12725), (439, 12836), (442, 12869), (447, 12932), (453, 12968), (457, 12998), (466, 13076), (467, 13079), (469, 13088), (473, 13112), (485, 13193), (486, 13199), (489, 13244), (490, 13247), (492, 13262), (501, 13307), (502, 13316), (503, 13325), (504, 13328), (521, 13433), (533, 13481), (534, 13484), (536, 13487), (545, 13586), (546, 13589), (551, 13601), (564, 13718), (569, 13751), (577, 13802), (584, 13832), (590, 13892), (600, 13973), (605, 13994), (609, 14027), (620, 14099), (621, 14108), (639, 14222), (643, 14252), (645, 14261), (650, 14300), (651, 14303), (654, 14333), (655, 14354), (677, 14552), (683, 14615), (684, 14621), (694, 14672), (714, 14858), (723, 14945), (728, 14972), (729, 14975), (743, 15050), (747, 15074), (752, 15113), (754, 15149), (759, 15170), (767, 15257), (770, 15299), (775, 15332), (776, 15344), (786, 15422), (790, 15488),

Gene: Axym_16 Start: 9629, Stop: 14767, Start Num: 23

Candidate Starts for Axym_16:

(Start: 17 @9605 has 5 MA's), (Start: 23 @9629 has 36 MA's), (27, 9656), (40, 9785), (43, 9860), (68, 10013), (69, 10016), (87, 10112), (90, 10121), (96, 10151), (98, 10157), (100, 10172), (101, 10175), (105, 10196), (114, 10268), (116, 10289), (126, 10355), (129, 10376), (143, 10493), (170, 10655), (178, 10694), (187, 10769), (201, 10928), (206, 10940), (209, 10967), (214, 11012), (216, 11024), (229, 11114), (231, 11132), (234, 11153), (237, 11183), (243, 11207), (246, 11219), (249, 11258), (253, 11291), (269, 11393), (270, 11396), (274, 11420), (285, 11513), (287, 11528), (291, 11567), (298, 11621), (303, 11663), (305, 11675), (312, 11705), (319, 11735), (320, 11738), (330, 11846), (331, 11849), (336, 11900), (350, 11975), (359, 12065), (361, 12077), (370, 12122), (375, 12143), (376, 12146), (377, 12149), (393, 12224), (401, 12257), (404, 12278), (408, 12308), (415, 12356), (416, 12362), (420, 12389), (440, 12524), (456, 12641), (459, 12674), (460, 12695), (461, 12698), (474, 12764), (475, 12770), (477, 12785), (497, 12905), (499, 12914), (511, 12998), (567, 13319), (602, 13538), (608, 13574), (639, 13787), (673, 13979), (681, 14027), (685, 14048), (699, 14156), (711, 14222), (713, 14240), (719, 14300), (725, 14345), (732, 14375), (733, 14384), (738, 14414), (749, 14480), (753, 14528), (760, 14588), (770, 14675), (779, 14738),

Gene: Azira_18 Start: 10619, Stop: 15748, Start Num: 23

Candidate Starts for Azira_18:

(18, 10598), (Start: 23 @10619 has 36 MA's), (27, 10646), (40, 10775), (46, 10871), (53, 10922), (65, 10979), (70, 11012), (71, 11015), (87, 11102), (91, 11114), (100, 11162), (101, 11165), (102, 11171), (109, 11225), (111, 11231), (116, 11279), (126, 11345), (129, 11366), (187, 11759), (188, 11762), (195, 11864), (206, 11930), (207, 11936), (209, 11957), (236, 12161), (239, 12179), (241, 12185), (243, 12197), (246, 12209), (249, 12248), (251, 12260), (256, 12296), (263, 12353), (268, 12377), (269, 12383), (285, 12503), (287, 12518), (291, 12557), (300, 12632), (305, 12665), (309, 12680), (310, 12686), (311, 12692), (320, 12728), (330, 12836), (339, 12908), (349, 12962), (361, 13067), (370, 13112), (376, 13136), (389, 13196), (392, 13208), (393, 13214), (399, 13241), (400, 13244), (401, 13247), (414, 13340), (415, 13346), (422, 13397), (431, 13466), (437, 13499), (440, 13514), (441, 13520), (448, 13577), (450, 13589), (455, 13628), (456, 13631), (458, 13652), (459, 13664), (460, 13685), (461, 13688), (468, 13727), (471, 13739), (474, 13754), (497, 13895), (511, 13991), (522, 14057), (532, 14078), (535, 14084), (567, 14321), (573, 14351), (578, 14390), (599, 14525), (606, 14555), (608, 14576), (632, 14735), (636, 14768), (673, 14981), (679, 14999), (681, 15005), (699, 15134), (711, 15200), (716, 15251), (725, 15323), (733, 15362), (738, 15392), (744, 15425), (749, 15458), (758, 15530), (763, 15602), (770, 15656), (772, 15662), (779, 15719),

Gene: Azula_19 Start: 10619, Stop: 16108, Start Num: 4

Candidate Starts for Azula_19:

(Start: 4 @10619 has 38 MA's), (Start: 6 @10634 has 1 MA's), (Start: 7 @10640 has 1 MA's), (Start: 9 @10670 has 1 MA's), (10, 10679), (11, 10682), (13, 10724), (33, 10835), (35, 10856), (41, 10976), (46, 11018), (56, 11084), (59, 11102), (63, 11123), (64, 11126), (67, 11144), (73, 11168), (88, 11252), (98, 11294), (100, 11309), (102, 11318), (124, 11486), (129, 11513), (143, 11630), (173, 11801), (178, 11831), (198, 12035), (206, 12080), (209, 12107), (210, 12119), (212, 12131), (224, 12209), (229, 12254), (233, 12281), (236, 12311), (249, 12398), (250, 12401), (254, 12440), (263, 12503), (265, 12512), (274, 12560), (278, 12602), (283, 12647), (285, 12653), (287, 12668), (293, 12722), (298, 12761), (300, 12782), (301, 12785), (303, 12803), (309, 12830), (314, 12851), (316, 12857), (320, 12878), (323, 12896), (324, 12905), (365, 13178), (385, 13232), (400, 13262), (401, 13265), (408, 13316), (419, 13397), (420, 13400), (426, 13433), (429, 13463), (431, 13487), (442, 13553), (478, 13820), (486, 13868), (487, 13901), (489, 13913), (490, 13916), (501, 13976), (502, 13985), (503, 13994), (510, 14045), (523, 14117), (528, 14135), (536, 14156), (545, 14255), (546, 14258), (553, 14291), (561, 14357), (562, 14375), (564, 14390), (569, 14423), (577, 14474), (586, 14525), (594, 14594), (617, 14768), (618, 14771), (629, 14843), (630, 14846), (638, 14912), (639, 14915), (641, 14933), (649, 14993), (656, 15050), (657, 15068), (666, 15149), (667, 15152), (670, 15167), (686, 15338), (696, 15392), (706, 15464), (707, 15473), (712, 15509), (720, 15569), (722, 15587), (726, 15605), (737, 15650), (741, 15683), (757, 15794), (762, 15863), (772, 15926), (774, 15944), (789, 16094),

Gene: BBQValindra_17 Start: 10583, Stop: 15709, Start Num: 20

Candidate Starts for BBQValindra_17:

(Start: 20 @10583 has 13 MA's), (Start: 23 @10592 has 36 MA's), (49, 10865), (51, 10874), (54, 10904), (67, 10970), (99, 11126), (102, 11144), (121, 11297), (129, 11339), (140, 11426), (170, 11618), (188, 11735), (193, 11774), (198, 11858), (200, 11867), (201, 11891), (205, 11900), (207, 11909), (210, 11942), (212, 11954), (215, 11978), (222, 12023), (224, 12032), (228, 12068), (233, 12104), (234, 12116), (236, 12134), (243, 12170), (258, 12293), (265, 12335), (270, 12359), (283, 12470), (284, 12473), (285, 12476), (287, 12491), (293, 12545), (298, 12584), (311, 12665), (316, 12680), (320, 12701), (322, 12716), (324, 12728), (325, 12764), (328, 12800), (353, 12962), (382, 13019), (390, 13031), (391, 13034), (401, 13067), (402, 13073), (403, 13085), (414, 13160), (415, 13166), (416, 13172), (418, 13193), (419, 13196), (420, 13199), (429, 13262), (433, 13298), (436, 13313), (441, 13337), (443, 13352), (444, 13355), (452, 13415), (463, 13514), (470, 13556), (483, 13634), (491, 13703), (496, 13721), (512, 13829), (513, 13832), (515, 13838), (518, 13856), (519, 13859), (525, 13880), (530, 13898), (531, 13901), (534, 13910), (547, 14015), (553, 14045), (555, 14063), (556, 14069), (563, 14129), (572, 14189), (582, 14237), (587, 14267), (595, 14315), (597, 14327), (607, 14387), (612, 14444), (617, 14462), (625, 14507), (630, 14534), (633, 14552), (636,

14582), (637, 14591), (642, 14630), (644, 14636), (646, 14645), (664, 14804), (668, 14846), (694, 15038), (695, 15041), (698, 15098), (702, 15107), (704, 15119), (708, 15140), (740, 15353), (747, 15392), (758, 15461), (761, 15515), (782, 15668), (784, 15692),

Gene: BENtherdunthat_18 Start: 9881, Stop: 15508, Start Num: 16

Candidate Starts for BENtherdunthat_18:

(Start: 16 @9881 has 11 MA's), (Start: 26 @9926 has 1 MA's), (28, 9947), (32, 9968), (36, 10013), (Start: 37 @10028 has 1 MA's), (42, 10112), (48, 10154), (49, 10166), (59, 10229), (62, 10244), (64, 10253), (67, 10271), (68, 10277), (80, 10325), (105, 10460), (123, 10610), (129, 10640), (178, 10964), (191, 11060), (198, 11168), (205, 11210), (206, 11213), (207, 11219), (209, 11240), (220, 11321), (229, 11387), (233, 11414), (234, 11426), (236, 11444), (237, 11456), (243, 11480), (246, 11492), (249, 11531), (250, 11534), (251, 11543), (254, 11573), (271, 11678), (274, 11693), (277, 11723), (278, 11735), (283, 11780), (285, 11786), (287, 11801), (290, 11831), (292, 11852), (293, 11855), (301, 11918), (304, 11945), (305, 11948), (306, 11951), (307, 11957), (313, 11981), (314, 11984), (316, 11990), (318, 11996), (320, 12011), (323, 12029), (325, 12074), (334, 12158), (335, 12164), (339, 12191), (352, 12284), (353, 12293), (361, 12350), (362, 12362), (371, 12398), (372, 12404), (384, 12446), (386, 12458), (393, 12497), (395, 12503), (396, 12506), (399, 12524), (400, 12527), (401, 12530), (405, 12554), (415, 12629), (421, 12668), (425, 12692), (429, 12725), (439, 12836), (442, 12869), (447, 12932), (453, 12968), (457, 12998), (466, 13076), (467, 13079), (469, 13088), (473, 13112), (485, 13193), (486, 13199), (489, 13244), (490, 13247), (492, 13262), (501, 13307), (502, 13316), (503, 13325), (504, 13328), (521, 13433), (533, 13481), (534, 13484), (536, 13487), (545, 13586), (546, 13589), (551, 13601), (564, 13718), (569, 13751), (577, 13802), (584, 13832), (590, 13892), (600, 13973), (605, 13994), (609, 14027), (620, 14099), (621, 14108), (639, 14222), (643, 14252), (645, 14261), (650, 14300), (651, 14303), (654, 14333), (655, 14354), (677, 14552), (683, 14615), (684, 14621), (694, 14672), (714, 14858), (723, 14945), (728, 14972), (729, 14975), (743, 15050), (747, 15074), (752, 15113), (754, 15149), (759, 15170), (767, 15257), (770, 15299), (775, 15332), (776, 15344), (786, 15422), (790, 15488),

Gene: BackstagePass_17 Start: 10561, Stop: 15849, Start Num: 20

Candidate Starts for BackstagePass_17:

(Start: 20 @10561 has 13 MA's), (Start: 23 @10570 has 36 MA's), (49, 10843), (51, 10852), (54, 10882), (66, 10945), (69, 10957), (73, 10972), (79, 10999), (93, 11083), (99, 11104), (104, 11131), (107, 11143), (121, 11275), (129, 11317), (136, 11371), (140, 11404), (173, 11605), (183, 11683), (198, 11836), (201, 11869), (205, 11878), (207, 11887), (210, 11920), (212, 11932), (215, 11956), (222, 12001), (229, 12055), (232, 12079), (233, 12082), (234, 12094), (236, 12112), (243, 12148), (258, 12271), (265, 12313), (283, 12448), (285, 12454), (287, 12469), (297, 12559), (298, 12562), (301, 12586), (304, 12613), (312, 12646), (316, 12658), (320, 12679), (324, 12706), (328, 12778), (354, 12949), (355, 12952), (356, 12964), (358, 12973), (373, 13057), (386, 13102), (401, 13174), (403, 13192), (408, 13225), (410, 13237), (415, 13273), (420, 13306), (427, 13357), (433, 13405), (441, 13444), (443, 13459), (444, 13462), (445, 13468), (450, 13513), (463, 13621), (470, 13663), (483, 13741), (486, 13765), (491, 13810), (512, 13933), (513, 13936), (519, 13963), (525, 13984), (530, 14002), (531, 14005), (534, 14014), (547, 14119), (556, 14173), (589, 14398), (593, 14434), (607, 14524), (610, 14566), (625, 14647), (630, 14674), (633, 14692), (637, 14731), (642, 14770), (644, 14776), (646, 14785), (664, 14944), (668, 14986), (694, 15178), (695, 15181), (702, 15247), (704, 15259), (708, 15280), (709, 15283), (740, 15493), (747, 15532), (758, 15601), (761, 15655), (782, 15808),

Gene: Balloona_15 Start: 9534, Stop: 14471, Start Num: 40

Candidate Starts for Balloona_15:

(Start: 23 @9378 has 36 MA's), (40, 9534), (52, 9663), (55, 9693), (68, 9762), (71, 9774), (80, 9810), (87, 9861), (90, 9870), (98, 9906), (102, 9930), (111, 9990), (118, 10044), (121, 10083), (122, 10089), (126, 10104), (129, 10125), (152, 10296), (164, 10359), (170, 10404), (182, 10485), (198, 10644), (201, 10677), (206, 10689), (209, 10716), (216, 10773), (221, 10803), (223, 10815), (235, 10917),

(236, 10920), (249, 11007), (256, 11055), (274, 11169), (285, 11262), (287, 11277), (289, 11298), (293, 11331), (296, 11361), (299, 11373), (303, 11412), (308, 11436), (309, 11439), (315, 11463), (320, 11487), (329, 11592), (342, 11670), (349, 11700), (350, 11703), (352, 11739), (358, 11781), (361, 11805), (363, 11820), (366, 11835), (370, 11850), (376, 11874), (386, 11913), (388, 11928), (389, 11934), (399, 11979), (401, 11985), (418, 12111), (424, 12141), (430, 12192), (435, 12228), (439, 12249), (440, 12252), (449, 12324), (456, 12369), (459, 12402), (460, 12423), (471, 12477), (482, 12552), (499, 12636), (511, 12723), (550, 12909), (567, 13041), (573, 13071), (595, 13209), (604, 13260), (608, 13290), (632, 13455), (636, 13485), (669, 13665), (674, 13716), (681, 13743), (685, 13764), (699, 13860), (707, 13908), (711, 13926), (725, 14049), (731, 14073), (733, 14088), (738, 14118), (742, 14145), (744, 14151), (749, 14184), (756, 14253), (758, 14256), (760, 14292), (771, 14382),

Gene: Barco_17 Start: 10274, Stop: 15796, Start Num: 4

Candidate Starts for Barco_17:

(Start: 4 @10274 has 38 MA's), (Start: 6 @10289 has 1 MA's), (Start: 7 @10295 has 1 MA's), (Start: 9 @10325 has 1 MA's), (10, 10334), (11, 10337), (13, 10379), (33, 10490), (35, 10511), (41, 10631), (46, 10673), (56, 10739), (59, 10757), (63, 10778), (64, 10781), (67, 10799), (73, 10823), (88, 10907), (89, 10910), (98, 10949), (100, 10964), (102, 10973), (124, 11141), (129, 11168), (143, 11285), (173, 11456), (178, 11486), (198, 11690), (206, 11735), (209, 11762), (210, 11774), (224, 11864), (229, 11909), (233, 11936), (236, 11966), (249, 12053), (250, 12056), (254, 12095), (267, 12179), (274, 12215), (278, 12257), (283, 12302), (285, 12308), (286, 12320), (287, 12323), (293, 12377), (298, 12416), (300, 12437), (301, 12440), (303, 12458), (304, 12467), (309, 12485), (314, 12506), (316, 12512), (320, 12533), (324, 12560), (329, 12638), (369, 12827), (378, 12851), (384, 12863), (385, 12866), (397, 12881), (400, 12896), (401, 12899), (408, 12950), (419, 13031), (420, 13034), (426, 13067), (429, 13097), (431, 13121), (478, 13454), (486, 13502), (489, 13547), (490, 13550), (492, 13565), (501, 13610), (502, 13619), (503, 13628), (510, 13679), (523, 13751), (528, 13769), (536, 13790), (545, 13889), (546, 13892), (553, 13925), (561, 13991), (562, 14009), (564, 14024), (569, 14057), (577, 14108), (586, 14159), (591, 14207), (617, 14402), (618, 14405), (629, 14477), (630, 14480), (638, 14546), (639, 14549), (641, 14567), (649, 14627), (656, 14684), (657, 14702), (666, 14783), (667, 14786), (670, 14801), (696, 15014), (700, 15080), (709, 15134), (710, 15146), (711, 15152), (725, 15275), (731, 15299), (735, 15317), (738, 15341), (739, 15347), (742, 15368), (749, 15407), (762, 15548), (765, 15560), (772, 15611), (774, 15629), (789, 15779),

Gene: Bavilard_16 Start: 10158, Stop: 15257, Start Num: 23

Candidate Starts for Bavilard_16:

(Start: 23 @10158 has 36 MA's), (40, 10314), (52, 10443), (55, 10473), (63, 10515), (68, 10542), (80, 10590), (87, 10641), (90, 10650), (98, 10686), (102, 10710), (111, 10770), (118, 10824), (121, 10863), (122, 10869), (126, 10884), (129, 10905), (148, 11064), (152, 11076), (164, 11139), (170, 11184), (182, 11265), (198, 11424), (201, 11457), (206, 11469), (209, 11496), (216, 11553), (221, 11583), (223, 11595), (235, 11697), (236, 11700), (249, 11787), (255, 11832), (256, 11835), (274, 11949), (285, 12042), (287, 12057), (289, 12078), (293, 12111), (296, 12141), (299, 12153), (303, 12192), (308, 12216), (309, 12219), (315, 12243), (320, 12267), (329, 12372), (338, 12420), (342, 12450), (346, 12465), (349, 12480), (352, 12519), (358, 12561), (361, 12585), (363, 12600), (366, 12615), (370, 12630), (376, 12654), (386, 12693), (388, 12708), (389, 12714), (394, 12735), (399, 12759), (401, 12765), (418, 12891), (424, 12921), (428, 12957), (429, 12960), (435, 13008), (439, 13029), (440, 13032), (449, 13104), (456, 13149), (459, 13182), (460, 13203), (471, 13257), (482, 13332), (499, 13416), (511, 13503), (550, 13689), (567, 13821), (573, 13851), (595, 13989), (604, 14040), (608, 14070), (623, 14175), (632, 14226), (636, 14256), (669, 14436), (674, 14487), (681, 14529), (685, 14550), (699, 14646), (711, 14712), (725, 14835), (731, 14859), (733, 14874), (738, 14904), (742, 14931), (744, 14937), (749, 14970), (756, 15039), (758, 15042), (760, 15078), (771, 15168),

Gene: Begonia_18 Start: 10785, Stop: 16274, Start Num: 4

Candidate Starts for Begonia_18:

(Start: 4 @10785 has 38 MA's), (8, 10824), (Start: 9 @10836 has 1 MA's), (10, 10845), (11, 10848), (13, 10890), (33, 11001), (35, 11022), (41, 11142), (46, 11184), (56, 11250), (59, 11268), (62, 11283), (63, 11289), (64, 11292), (67, 11310), (73, 11334), (88, 11418), (98, 11460), (100, 11475), (102, 11484), (124, 11652), (129, 11679), (139, 11754), (143, 11796), (151, 11844), (173, 11967), (178, 11997), (198, 12201), (206, 12246), (209, 12273), (210, 12285), (224, 12375), (229, 12420), (233, 12447), (236, 12477), (249, 12564), (254, 12606), (274, 12726), (278, 12768), (283, 12813), (285, 12819), (286, 12831), (287, 12834), (293, 12888), (298, 12927), (300, 12948), (301, 12951), (303, 12969), (309, 12996), (316, 13023), (320, 13044), (324, 13071), (328, 13143), (365, 13344), (369, 13359), (378, 13383), (385, 13398), (400, 13428), (401, 13431), (408, 13482), (419, 13563), (420, 13566), (426, 13599), (429, 13629), (431, 13653), (442, 13719), (478, 13986), (486, 14034), (489, 14079), (490, 14082), (492, 14097), (501, 14142), (502, 14151), (503, 14160), (510, 14211), (523, 14283), (528, 14301), (536, 14322), (545, 14421), (546, 14424), (553, 14457), (561, 14523), (562, 14541), (564, 14556), (569, 14589), (577, 14640), (586, 14691), (617, 14934), (618, 14937), (630, 15012), (638, 15078), (639, 15081), (641, 15099), (649, 15159), (666, 15315), (667, 15318), (670, 15333), (696, 15552), (703, 15609), (706, 15624), (712, 15672), (717, 15717), (740, 15837), (741, 15846), (748, 15885), (757, 15957), (762, 16026), (765, 16038), (772, 16089), (774, 16107), (780, 16164), (789, 16257),

Gene: BigChungus_15 Start: 9403, Stop: 14511, Start Num: 23

Candidate Starts for BigChungus_15:

(Start: 23 @9403 has 36 MA's), (40, 9559), (52, 9688), (55, 9718), (68, 9787), (71, 9799), (80, 9835), (87, 9886), (90, 9895), (98, 9931), (102, 9955), (111, 10015), (118, 10069), (121, 10108), (122, 10114), (126, 10129), (129, 10150), (152, 10321), (164, 10384), (170, 10429), (182, 10510), (198, 10669), (201, 10702), (206, 10714), (209, 10741), (216, 10798), (221, 10828), (223, 10840), (235, 10942), (236, 10945), (249, 11032), (256, 11080), (274, 11194), (285, 11287), (287, 11302), (289, 11323), (293, 11356), (296, 11386), (299, 11398), (303, 11437), (308, 11461), (309, 11464), (315, 11488), (320, 11512), (329, 11617), (342, 11695), (349, 11725), (350, 11728), (352, 11764), (358, 11806), (361, 11830), (363, 11845), (366, 11860), (370, 11875), (376, 11899), (386, 11938), (388, 11953), (389, 11959), (399, 12004), (401, 12010), (418, 12136), (424, 12166), (428, 12202), (429, 12205), (435, 12253), (439, 12274), (440, 12277), (449, 12349), (456, 12394), (459, 12427), (460, 12448), (471, 12502), (482, 12577), (499, 12661), (511, 12748), (567, 13066), (573, 13096), (595, 13234), (604, 13285), (608, 13315), (632, 13480), (636, 13510), (669, 13690), (674, 13741), (681, 13783), (685, 13804), (699, 13900), (707, 13948), (711, 13966), (725, 14089), (731, 14113), (733, 14128), (738, 14158), (742, 14185), (744, 14191), (749, 14224), (756, 14293), (758, 14296), (760, 14332), (771, 14422),

Gene: BillDoor_18 Start: 9610, Stop: 14400, Start Num: 74

Candidate Starts for BillDoor_18:

(Start: 74 @9610 has 16 MA's), (Start: 81 @9637 has 1 MA's), (94, 9715), (106, 9766), (117, 9853), (120, 9868), (128, 9925), (130, 9943), (132, 9970), (134, 9973), (142, 10042), (147, 10099), (157, 10144), (161, 10162), (168, 10207), (176, 10243), (180, 10276), (188, 10324), (189, 10327), (194, 10375), (195, 10414), (197, 10429), (227, 10621), (230, 10639), (244, 10723), (268, 10870), (273, 10897), (283, 10990), (285, 10996), (287, 11011), (291, 11050), (292, 11062), (301, 11128), (316, 11200), (319, 11218), (320, 11221), (324, 11248), (336, 11383), (350, 11458), (352, 11494), (361, 11560), (370, 11605), (375, 11626), (376, 11629), (377, 11632), (386, 11668), (393, 11707), (395, 11713), (401, 11740), (419, 11869), (420, 11872), (422, 11890), (441, 12013), (443, 12028), (459, 12157), (460, 12178), (468, 12220), (474, 12247), (475, 12253), (495, 12385), (499, 12397), (511, 12484), (519, 12526), (529, 12562), (552, 12688), (557, 12727), (575, 12856), (585, 12913), (592, 12958), (606, 13051), (613, 13126), (624, 13189), (636, 13270), (639, 13291), (662, 13468), (663, 13474), (689, 13693), (697, 13771), (699, 13789), (701, 13795), (711, 13855), (713, 13873), (716, 13906), (725, 13978), (733, 14017), (738, 14047), (749, 14113), (753, 14161), (760, 14221), (771, 14311), (779, 14371),

Gene: Biskit_17 Start: 9616, Stop: 14415, Start Num: 74

Candidate Starts for Biskit_17:

(Start: 74 @9616 has 16 MA's), (Start: 81 @9643 has 1 MA's), (106, 9772), (120, 9874), (125, 9919), (128, 9931), (130, 9949), (132, 9976), (134, 9979), (135, 9994), (141, 10045), (142, 10048), (147, 10105), (149, 10108), (157, 10150), (161, 10168), (168, 10213), (176, 10249), (180, 10282), (185, 10315), (186, 10327), (194, 10381), (195, 10420), (197, 10435), (199, 10444), (202, 10471), (211, 10522), (218, 10564), (221, 10582), (223, 10591), (230, 10645), (240, 10708), (243, 10723), (251, 10786), (268, 10876), (273, 10903), (283, 10996), (285, 11002), (287, 11017), (291, 11056), (301, 11134), (306, 11167), (316, 11206), (319, 11224), (320, 11227), (324, 11254), (327, 11311), (329, 11332), (337, 11395), (342, 11431), (345, 11443), (350, 11464), (352, 11500), (358, 11542), (359, 11554), (361, 11566), (370, 11611), (371, 11614), (375, 11632), (376, 11635), (377, 11638), (393, 11713), (395, 11719), (401, 11746), (409, 11806), (412, 11821), (418, 11872), (419, 11875), (420, 11878), (422, 11896), (436, 11995), (439, 12010), (440, 12013), (459, 12163), (460, 12184), (468, 12226), (474, 12253), (475, 12259), (495, 12391), (499, 12403), (511, 12490), (519, 12532), (529, 12568), (543, 12643), (552, 12694), (557, 12733), (565, 12811), (575, 12862), (585, 12919), (606, 13057), (613, 13132), (636, 13276), (639, 13297), (662, 13474), (663, 13480), (699, 13804), (701, 13810), (711, 13870), (713, 13888), (716, 13921), (725, 13993), (733, 14032), (738, 14062), (749, 14128), (753, 14176), (760, 14236), (771, 14326), (779, 14386),

Gene: BlingBling_17 Start: 10274, Stop: 15796, Start Num: 4

Candidate Starts for BlingBling_17:

(Start: 4 @10274 has 38 MA's), (Start: 6 @10289 has 1 MA's), (Start: 7 @10295 has 1 MA's), (Start: 9 @10325 has 1 MA's), (10, 10334), (11, 10337), (13, 10379), (33, 10490), (35, 10511), (41, 10631), (46, 10673), (56, 10739), (59, 10757), (63, 10778), (64, 10781), (67, 10799), (73, 10823), (88, 10907), (89, 10910), (98, 10949), (100, 10964), (102, 10973), (124, 11141), (129, 11168), (143, 11285), (173, 11456), (178, 11486), (198, 11690), (206, 11735), (209, 11762), (210, 11774), (224, 11864), (229, 11909), (233, 11936), (236, 11966), (249, 12053), (250, 12056), (254, 12095), (267, 12179), (274, 12215), (278, 12257), (283, 12302), (285, 12308), (286, 12320), (287, 12323), (293, 12377), (298, 12416), (300, 12437), (301, 12440), (303, 12458), (304, 12467), (309, 12485), (314, 12506), (316, 12512), (320, 12533), (324, 12560), (329, 12638), (369, 12827), (378, 12851), (384, 12863), (385, 12866), (397, 12881), (400, 12896), (401, 12899), (408, 12950), (419, 13031), (420, 13034), (426, 13067), (429, 13097), (431, 13121), (478, 13454), (486, 13502), (489, 13547), (490, 13550), (492, 13565), (501, 13610), (502, 13619), (503, 13628), (510, 13679), (523, 13751), (528, 13769), (536, 13790), (545, 13889), (546, 13892), (553, 13925), (561, 13991), (562, 14009), (564, 14024), (569, 14057), (577, 14108), (586, 14159), (591, 14207), (617, 14402), (618, 14405), (629, 14477), (630, 14480), (638, 14546), (639, 14549), (641, 14567), (649, 14627), (656, 14684), (657, 14702), (666, 14783), (667, 14786), (670, 14801), (696, 15014), (700, 15080), (709, 15134), (710, 15146), (711, 15152), (725, 15275), (731, 15299), (735, 15317), (738, 15341), (739, 15347), (742, 15368), (749, 15407), (762, 15548), (765, 15560), (772, 15611), (774, 15629), (789, 15779),

Gene: Blino_17 Start: 10173, Stop: 15764, Start Num: 4

Candidate Starts for Blino_17:

(Start: 4 @10173 has 38 MA's), (Start: 6 @10188 has 1 MA's), (Start: 9 @10224 has 1 MA's), (10, 10233), (11, 10236), (13, 10278), (33, 10389), (35, 10410), (41, 10530), (56, 10638), (59, 10656), (63, 10677), (64, 10680), (67, 10698), (90, 10812), (98, 10848), (100, 10863), (102, 10872), (124, 11040), (129, 11067), (143, 11184), (173, 11355), (178, 11385), (198, 11589), (206, 11634), (229, 11808), (233, 11835), (236, 11865), (249, 11952), (250, 11955), (254, 11994), (263, 12057), (274, 12114), (278, 12156), (283, 12201), (285, 12207), (286, 12219), (287, 12222), (293, 12276), (298, 12315), (300, 12336), (301, 12339), (303, 12357), (309, 12384), (314, 12405), (316, 12411), (320, 12432), (324, 12459), (326, 12507), (329, 12537), (353, 12693), (356, 12717), (358, 12726), (360, 12747), (379, 12828), (400, 12924), (401, 12927), (402, 12933), (407, 12975), (408, 12978), (411, 12999), (419, 13059), (420, 13062), (426, 13095), (429, 13125), (442, 13215), (478, 13482), (486, 13530), (489, 13575), (490, 13578), (492, 13593), (501, 13638), (502, 13647), (503, 13656), (510, 13707),

(523, 13779), (528, 13797), (536, 13818), (545, 13917), (546, 13920), (553, 13953), (561, 14019), (562, 14037), (564, 14052), (569, 14085), (577, 14136), (586, 14187), (591, 14235), (617, 14430), (618, 14433), (629, 14505), (630, 14508), (638, 14574), (639, 14577), (641, 14595), (649, 14655), (657, 14730), (667, 14814), (670, 14829), (696, 15042), (703, 15099), (706, 15114), (712, 15162), (717, 15207), (740, 15327), (741, 15336), (748, 15375), (757, 15447), (762, 15516), (772, 15579), (774, 15597), (780, 15654), (789, 15747),

Gene: Blondies_17 Start: 9629, Stop: 14398, Start Num: 81

Candidate Starts for Blondies_17:

(Start: 74 @9602 has 16 MA's), (Start: 81 @9629 has 1 MA's), (83, 9635), (106, 9758), (120, 9860), (125, 9905), (128, 9917), (130, 9935), (132, 9962), (134, 9965), (135, 9980), (141, 10031), (142, 10034), (147, 10091), (149, 10094), (150, 10097), (157, 10136), (161, 10154), (168, 10199), (176, 10235), (180, 10268), (185, 10301), (186, 10313), (194, 10367), (195, 10406), (197, 10421), (199, 10430), (202, 10457), (211, 10508), (221, 10568), (223, 10577), (230, 10631), (240, 10694), (243, 10709), (251, 10772), (268, 10862), (273, 10889), (283, 10982), (285, 10988), (287, 11003), (291, 11042), (301, 11120), (306, 11153), (316, 11192), (319, 11210), (320, 11213), (324, 11240), (327, 11297), (329, 11318), (337, 11381), (345, 11429), (350, 11450), (352, 11486), (358, 11528), (361, 11552), (370, 11597), (371, 11600), (375, 11618), (376, 11621), (377, 11624), (393, 11699), (395, 11705), (401, 11732), (409, 11792), (418, 11858), (419, 11861), (420, 11864), (422, 11882), (436, 11981), (439, 11996), (440, 11999), (459, 12149), (460, 12170), (468, 12212), (474, 12239), (475, 12245), (495, 12377), (499, 12389), (511, 12476), (519, 12518), (529, 12554), (543, 12629), (552, 12680), (557, 12719), (575, 12848), (585, 12905), (606, 13043), (613, 13118), (636, 13262), (639, 13283), (662, 13457), (663, 13463), (699, 13787), (701, 13793), (711, 13853), (713, 13871), (716, 13904), (725, 13976), (733, 14015), (738, 14045), (749, 14111), (753, 14159), (760, 14219), (771, 14309), (779, 14369),

Gene: Blueberry_19 Start: 10619, Stop: 16108, Start Num: 4

Candidate Starts for Blueberry_19:

(Start: 4 @10619 has 38 MA's), (Start: 6 @10634 has 1 MA's), (Start: 7 @10640 has 1 MA's), (Start: 9 @10670 has 1 MA's), (10, 10679), (11, 10682), (13, 10724), (33, 10835), (35, 10856), (41, 10976), (46, 11018), (56, 11084), (59, 11102), (63, 11123), (64, 11126), (67, 11144), (73, 11168), (88, 11252), (98, 11294), (100, 11309), (102, 11318), (124, 11486), (129, 11513), (143, 11630), (173, 11801), (178, 11831), (198, 12035), (206, 12080), (209, 12107), (210, 12119), (212, 12131), (224, 12209), (229, 12254), (233, 12281), (236, 12311), (249, 12398), (250, 12401), (254, 12440), (263, 12503), (265, 12512), (274, 12560), (278, 12602), (283, 12647), (285, 12653), (287, 12668), (293, 12722), (298, 12761), (300, 12782), (301, 12785), (303, 12803), (309, 12830), (314, 12851), (316, 12857), (320, 12878), (323, 12896), (324, 12905), (365, 13178), (385, 13232), (400, 13262), (401, 13265), (408, 13316), (419, 13397), (420, 13400), (426, 13433), (429, 13463), (431, 13487), (442, 13553), (478, 13820), (486, 13868), (487, 13901), (489, 13913), (490, 13916), (501, 13976), (502, 13985), (503, 13994), (510, 14045), (523, 14117), (528, 14135), (536, 14156), (545, 14255), (546, 14258), (553, 14291), (561, 14357), (562, 14375), (564, 14390), (569, 14423), (577, 14474), (586, 14525), (594, 14594), (617, 14768), (618, 14771), (629, 14843), (630, 14846), (638, 14912), (639, 14915), (641, 14933), (649, 14993), (656, 15050), (657, 15068), (666, 15149), (667, 15152), (670, 15167), (686, 15338), (696, 15392), (706, 15464), (707, 15473), (712, 15509), (720, 15569), (722, 15587), (726, 15605), (737, 15650), (741, 15683), (757, 15794), (762, 15863), (772, 15926), (774, 15944), (789, 16094),

Gene: BotCity_18 Start: 9879, Stop: 15506, Start Num: 16

Candidate Starts for BotCity_18:

(Start: 16 @9879 has 11 MA's), (Start: 26 @9924 has 1 MA's), (28, 9945), (32, 9966), (36, 10011), (Start: 37 @10026 has 1 MA's), (42, 10110), (48, 10152), (49, 10164), (59, 10227), (62, 10242), (64, 10251), (67, 10269), (68, 10275), (80, 10323), (105, 10458), (123, 10608), (129, 10638), (178, 10962), (191, 11058), (198, 11166), (205, 11208), (206, 11211), (207, 11217), (209, 11238), (220, 11319),

(229, 11385), (233, 11412), (234, 11424), (236, 11442), (237, 11454), (243, 11478), (246, 11490), (249, 11529), (250, 11532), (251, 11541), (254, 11571), (271, 11676), (274, 11691), (277, 11721), (278, 11733), (283, 11778), (285, 11784), (287, 11799), (290, 11829), (292, 11850), (293, 11853), (301, 11916), (304, 11943), (305, 11946), (306, 11949), (307, 11955), (313, 11979), (314, 11982), (316, 11988), (318, 11994), (320, 12009), (323, 12027), (325, 12072), (334, 12156), (335, 12162), (339, 12189), (352, 12282), (353, 12291), (361, 12348), (362, 12360), (371, 12396), (372, 12402), (384, 12444), (386, 12456), (393, 12495), (395, 12501), (396, 12504), (399, 12522), (400, 12525), (401, 12528), (405, 12552), (415, 12627), (421, 12666), (425, 12690), (429, 12723), (439, 12834), (442, 12867), (447, 12930), (453, 12966), (457, 12996), (466, 13074), (467, 13077), (469, 13086), (473, 13110), (485, 13191), (486, 13197), (489, 13242), (490, 13245), (492, 13260), (501, 13305), (502, 13314), (503, 13323), (504, 13326), (521, 13431), (533, 13479), (534, 13482), (536, 13485), (545, 13584), (546, 13587), (551, 13599), (564, 13716), (569, 13749), (577, 13800), (584, 13830), (590, 13890), (600, 13971), (605, 13992), (609, 14025), (620, 14097), (621, 14106), (639, 14220), (643, 14250), (645, 14259), (650, 14298), (651, 14301), (654, 14331), (655, 14352), (677, 14550), (683, 14613), (684, 14619), (694, 14670), (714, 14856), (723, 14943), (728, 14970), (729, 14973), (743, 15048), (747, 15072), (752, 15111), (754, 15147), (759, 15168), (767, 15255), (770, 15297), (775, 15330), (776, 15342), (786, 15420), (790, 15486),

Gene: Bowser_17 Start: 10588, Stop: 15702, Start Num: 20

Candidate Starts for Bowser_17:

(Start: 20 @10588 has 13 MA's), (Start: 23 @10597 has 36 MA's), (49, 10870), (51, 10879), (54, 10909), (57, 10918), (67, 10975), (84, 11038), (93, 11110), (99, 11131), (102, 11149), (121, 11302), (129, 11344), (136, 11398), (171, 11626), (188, 11740), (193, 11779), (198, 11863), (201, 11896), (205, 11905), (207, 11914), (210, 11947), (212, 11959), (215, 11983), (222, 12028), (228, 12073), (233, 12109), (234, 12121), (236, 12139), (243, 12175), (258, 12298), (262, 12322), (265, 12340), (283, 12475), (285, 12481), (286, 12493), (287, 12496), (293, 12550), (298, 12589), (300, 12610), (301, 12613), (303, 12631), (304, 12640), (316, 12685), (320, 12706), (324, 12733), (329, 12811), (353, 12967), (382, 13024), (390, 13036), (391, 13039), (401, 13072), (403, 13090), (414, 13165), (415, 13171), (416, 13177), (418, 13198), (419, 13201), (420, 13204), (429, 13267), (433, 13303), (436, 13318), (441, 13342), (443, 13357), (444, 13360), (445, 13366), (450, 13411), (452, 13420), (463, 13519), (470, 13561), (484, 13645), (491, 13708), (496, 13726), (512, 13834), (515, 13843), (518, 13861), (519, 13864), (530, 13903), (531, 13906), (534, 13915), (553, 14050), (556, 14074), (572, 14194), (581, 14239), (587, 14272), (595, 14320), (597, 14332), (607, 14392), (625, 14512), (630, 14539), (633, 14557), (642, 14635), (644, 14641), (646, 14650), (658, 14770), (664, 14809), (668, 14851), (678, 14944), (694, 15037), (695, 15040), (698, 15097), (702, 15106), (704, 15118), (708, 15139), (721, 15244), (740, 15352), (747, 15391), (758, 15460), (761, 15514), (782, 15664),

Gene: Bubble_16 Start: 9629, Stop: 14767, Start Num: 23

Candidate Starts for Bubble_16:

(Start: 17 @9605 has 5 MA's), (Start: 23 @9629 has 36 MA's), (27, 9656), (40, 9785), (43, 9860), (68, 10013), (69, 10016), (87, 10112), (90, 10121), (96, 10151), (98, 10157), (100, 10172), (101, 10175), (105, 10196), (114, 10268), (116, 10289), (126, 10355), (129, 10376), (143, 10493), (170, 10655), (178, 10694), (187, 10769), (201, 10928), (206, 10940), (209, 10967), (214, 11012), (216, 11024), (229, 11114), (231, 11132), (234, 11153), (237, 11183), (243, 11207), (246, 11219), (249, 11258), (253, 11291), (269, 11393), (270, 11396), (274, 11420), (275, 11426), (285, 11513), (287, 11528), (291, 11567), (298, 11621), (312, 11705), (319, 11735), (320, 11738), (330, 11846), (331, 11849), (336, 11900), (350, 11975), (361, 12077), (370, 12122), (375, 12143), (376, 12146), (377, 12149), (393, 12224), (401, 12257), (404, 12278), (408, 12308), (415, 12356), (416, 12362), (420, 12389), (440, 12524), (456, 12641), (459, 12674), (460, 12695), (474, 12764), (475, 12770), (477, 12785), (497, 12905), (499, 12914), (511, 12998), (567, 13319), (602, 13538), (608, 13574), (639, 13787), (673, 13979), (681, 14027), (685, 14048), (699, 14156), (711, 14222), (713, 14240), (719, 14300), (725, 14345), (732, 14375), (733, 14384), (738, 14414), (749, 14480), (753, 14528), (760, 14588), (770, 14675), (779, 14738),

Gene: Budski_18 Start: 10015, Stop: 15501, Start Num: 37

Candidate Starts for Budski_18:

(Start: 16 @9868 has 11 MA's), (24, 9895), (Start: 26 @9913 has 1 MA's), (28, 9934), (32, 9955), (36, 10000), (Start: 37 @10015 has 1 MA's), (42, 10099), (48, 10141), (49, 10153), (59, 10216), (62, 10231), (64, 10240), (67, 10258), (68, 10264), (80, 10312), (105, 10447), (123, 10597), (129, 10627), (160, 10846), (173, 10921), (178, 10951), (198, 11155), (205, 11197), (206, 11200), (207, 11206), (209, 11227), (220, 11308), (229, 11374), (233, 11401), (234, 11413), (236, 11431), (237, 11443), (243, 11467), (246, 11479), (249, 11518), (250, 11521), (251, 11530), (254, 11560), (260, 11605), (271, 11665), (274, 11680), (277, 11710), (278, 11722), (283, 11767), (285, 11773), (287, 11788), (290, 11818), (292, 11839), (293, 11842), (301, 11905), (304, 11932), (305, 11935), (306, 11938), (307, 11944), (313, 11968), (314, 11971), (316, 11977), (318, 11983), (320, 11998), (323, 12016), (328, 12097), (334, 12145), (335, 12151), (339, 12178), (361, 12337), (362, 12349), (371, 12385), (386, 12445), (393, 12484), (395, 12490), (396, 12493), (400, 12514), (401, 12517), (415, 12616), (421, 12655), (425, 12679), (429, 12712), (432, 12757), (438, 12811), (446, 12898), (447, 12919), (453, 12955), (457, 12985), (466, 13063), (467, 13066), (469, 13075), (473, 13099), (485, 13180), (486, 13186), (489, 13231), (490, 13234), (492, 13249), (501, 13294), (502, 13303), (503, 13312), (504, 13315), (521, 13420), (533, 13468), (536, 13474), (545, 13573), (546, 13576), (551, 13588), (564, 13705), (569, 13738), (577, 13789), (579, 13801), (584, 13819), (590, 13879), (600, 13960), (605, 13981), (609, 14014), (619, 14077), (621, 14095), (639, 14209), (643, 14239), (645, 14248), (650, 14287), (651, 14290), (654, 14320), (655, 14341), (671, 14494), (677, 14545), (683, 14608), (684, 14614), (694, 14665), (714, 14851), (723, 14938), (728, 14965), (729, 14968), (743, 15043), (747, 15067), (752, 15106), (754, 15142), (759, 15163), (767, 15250), (770, 15292), (775, 15325), (776, 15337), (786, 15415), (790, 15481),

Gene: Bunker_17 Start: 10580, Stop: 15829, Start Num: 20

Candidate Starts for Bunker_17:

(Start: 20 @10580 has 13 MA's), (Start: 23 @10589 has 36 MA's), (39, 10736), (49, 10862), (51, 10871), (61, 10934), (62, 10940), (63, 10946), (67, 10967), (73, 10991), (80, 11021), (84, 11030), (99, 11123), (101, 11135), (102, 11141), (121, 11294), (129, 11336), (136, 11390), (140, 11423), (173, 11624), (198, 11855), (201, 11888), (205, 11897), (207, 11906), (210, 11939), (212, 11951), (215, 11975), (222, 12020), (224, 12029), (233, 12101), (234, 12113), (236, 12131), (243, 12167), (258, 12290), (262, 12314), (280, 12431), (283, 12467), (285, 12473), (287, 12488), (293, 12542), (298, 12581), (300, 12602), (301, 12605), (303, 12623), (304, 12632), (316, 12677), (319, 12695), (320, 12698), (324, 12725), (329, 12803), (354, 12968), (356, 12983), (358, 12992), (373, 13076), (399, 13187), (401, 13193), (402, 13199), (408, 13244), (410, 13256), (415, 13292), (416, 13298), (418, 13319), (420, 13325), (421, 13331), (427, 13376), (429, 13388), (433, 13424), (441, 13463), (443, 13478), (444, 13481), (445, 13487), (450, 13532), (470, 13682), (483, 13760), (484, 13766), (491, 13832), (496, 13850), (512, 13958), (513, 13961), (518, 13985), (519, 13988), (530, 14027), (531, 14030), (534, 14039), (539, 14087), (553, 14174), (556, 14198), (563, 14258), (572, 14318), (587, 14396), (595, 14444), (597, 14456), (607, 14516), (625, 14633), (630, 14660), (642, 14756), (644, 14762), (646, 14771), (664, 14930), (668, 14972), (702, 15230), (704, 15242), (708, 15263), (709, 15266), (711, 15284), (740, 15476), (747, 15515), (761, 15638), (782, 15788), (784, 15812),

Gene: Burnsey_16 Start: 9630, Stop: 14768, Start Num: 23

Candidate Starts for Burnsey_16:

(Start: 17 @9606 has 5 MA's), (Start: 23 @9630 has 36 MA's), (27, 9657), (40, 9786), (43, 9861), (68, 10014), (69, 10017), (87, 10113), (90, 10122), (96, 10152), (98, 10158), (100, 10173), (101, 10176), (105, 10197), (116, 10290), (126, 10356), (129, 10377), (143, 10494), (170, 10656), (178, 10695), (187, 10770), (201, 10929), (206, 10941), (209, 10968), (214, 11013), (216, 11025), (229, 11115), (231, 11133), (234, 11154), (237, 11184), (243, 11208), (246, 11220), (249, 11259), (253, 11292), (269, 11394), (270, 11397), (274, 11421), (285, 11514), (287, 11529), (291, 11568), (303, 11664), (311, 11703), (312, 11706), (320, 11739), (330, 11847), (331, 11850), (336, 11901), (350, 11976),

(361, 12078), (370, 12123), (375, 12144), (376, 12147), (377, 12150), (393, 12225), (401, 12258), (404, 12279), (408, 12309), (415, 12357), (416, 12363), (420, 12390), (440, 12525), (456, 12642), (459, 12675), (460, 12696), (461, 12699), (474, 12765), (475, 12771), (477, 12786), (497, 12906), (499, 12915), (511, 12999), (567, 13320), (602, 13539), (608, 13575), (639, 13788), (673, 13980), (681, 14028), (685, 14049), (699, 14157), (711, 14223), (713, 14241), (719, 14301), (725, 14346), (732, 14376), (733, 14385), (738, 14415), (749, 14481), (753, 14529), (760, 14589), (770, 14676), (779, 14739),

Gene: Button_17 Start: 9644, Stop: 13834, Start Num: 78

Candidate Starts for Button_17:

(Start: 72 @9617 has 7 MA's), (Start: 78 @9644 has 1 MA's), (118, 9890), (126, 9953), (133, 10010), (138, 10037), (141, 10079), (149, 10142), (153, 10157), (156, 10175), (159, 10193), (162, 10205), (167, 10238), (174, 10280), (177, 10295), (192, 10400), (194, 10424), (196, 10463), (200, 10487), (204, 10514), (208, 10544), (211, 10565), (220, 10619), (223, 10634), (241, 10763), (259, 10895), (261, 10904), (268, 10940), (287, 11081), (289, 11102), (293, 11135), (294, 11153), (297, 11171), (303, 11216), (316, 11270), (320, 11291), (338, 11354), (347, 11402), (349, 11414), (352, 11453), (381, 11507), (393, 11534), (395, 11540), (400, 11564), (401, 11567), (409, 11627), (414, 11660), (420, 11699), (422, 11717), (423, 11720), (429, 11762), (430, 11774), (434, 11807), (439, 11831), (443, 11855), (444, 11858), (458, 11972), (459, 11984), (462, 12014), (464, 12023), (465, 12029), (488, 12182), (505, 12242), (506, 12251), (508, 12257), (514, 12293), (549, 12425), (567, 12563), (571, 12587), (603, 12785), (604, 12788), (627, 12950), (631, 12974), (632, 12977), (665, 13079), (691, 13184), (703, 13256), (707, 13280), (710, 13292), (713, 13316), (715, 13328), (724, 13412), (725, 13418), (735, 13460), (738, 13481), (744, 13514), (749, 13547), (751, 13568), (753, 13595), (760, 13655), (762, 13682), (764, 13691), (766, 13703), (779, 13805),

Gene: Buttrmilkdreams_16 Start: 9601, Stop: 14397, Start Num: 74

Candidate Starts for Buttrmilkdreams_16:

(Start: 74 @9601 has 16 MA's), (Start: 81 @9628 has 1 MA's), (83, 9634), (106, 9757), (120, 9859), (125, 9904), (128, 9916), (130, 9934), (132, 9961), (134, 9964), (135, 9979), (141, 10030), (142, 10033), (147, 10090), (149, 10093), (157, 10135), (161, 10153), (168, 10198), (176, 10234), (180, 10267), (185, 10300), (186, 10312), (194, 10366), (195, 10405), (197, 10420), (199, 10429), (202, 10456), (211, 10507), (221, 10567), (223, 10576), (230, 10630), (240, 10693), (243, 10708), (268, 10861), (273, 10888), (281, 10969), (283, 10981), (285, 10987), (287, 11002), (290, 11032), (291, 11041), (301, 11119), (306, 11152), (316, 11191), (319, 11209), (320, 11212), (324, 11239), (327, 11296), (329, 11317), (337, 11380), (345, 11428), (350, 11449), (352, 11485), (358, 11527), (361, 11551), (370, 11596), (371, 11599), (375, 11617), (376, 11620), (377, 11623), (393, 11698), (395, 11704), (401, 11731), (409, 11791), (418, 11857), (419, 11860), (420, 11863), (422, 11881), (436, 11980), (439, 11995), (440, 11998), (459, 12148), (460, 12169), (468, 12211), (474, 12238), (475, 12244), (499, 12388), (511, 12475), (519, 12517), (529, 12553), (543, 12628), (552, 12679), (557, 12718), (575, 12847), (585, 12904), (606, 13042), (613, 13117), (636, 13261), (639, 13282), (662, 13456), (663, 13462), (699, 13786), (701, 13792), (711, 13852), (716, 13903), (725, 13975), (733, 14014), (738, 14044), (749, 14110), (753, 14158), (760, 14218), (771, 14308), (779, 14368),

Gene: CanesSauce_16 Start: 9646, Stop: 14433, Start Num: 74

Candidate Starts for CanesSauce_16:

(Start: 74 @9646 has 16 MA's), (Start: 81 @9673 has 1 MA's), (94, 9751), (106, 9802), (117, 9889), (120, 9904), (128, 9961), (130, 9979), (132, 10006), (134, 10009), (142, 10078), (147, 10135), (157, 10180), (161, 10198), (168, 10243), (176, 10279), (180, 10312), (188, 10360), (189, 10363), (194, 10411), (195, 10450), (197, 10465), (227, 10657), (230, 10675), (244, 10759), (268, 10906), (273, 10933), (283, 11026), (285, 11032), (287, 11047), (291, 11086), (292, 11098), (301, 11164), (316, 11236), (319, 11254), (320, 11257), (324, 11284), (352, 11530), (361, 11596), (370, 11641), (375, 11662), (376, 11665), (377, 11668), (386, 11704), (393, 11743), (395, 11749), (401, 11776), (419, 11905), (420, 11908), (422, 11926), (441, 12049), (443, 12064), (459, 12193), (460, 12214), (468,

12256), (474, 12283), (475, 12289), (495, 12421), (499, 12433), (511, 12520), (519, 12562), (529, 12598), (552, 12724), (557, 12763), (575, 12892), (585, 12949), (592, 12991), (606, 13084), (613, 13159), (624, 13222), (636, 13303), (639, 13324), (662, 13501), (663, 13507), (689, 13726), (697, 13804), (699, 13822), (701, 13828), (711, 13888), (713, 13906), (716, 13939), (725, 14011), (733, 14050), (738, 14080), (749, 14146), (753, 14194), (760, 14254), (771, 14344), (779, 14404),

Gene: CaptainKirk2_17 Start: 10277, Stop: 15820, Start Num: 4

Candidate Starts for CaptainKirk2_17:

(Start: 4 @10277 has 38 MA's), (Start: 6 @10292 has 1 MA's), (Start: 7 @10298 has 1 MA's), (Start: 9 @10328 has 1 MA's), (10, 10337), (11, 10340), (13, 10382), (33, 10493), (35, 10514), (56, 10742), (59, 10760), (62, 10775), (63, 10781), (64, 10784), (67, 10802), (73, 10826), (88, 10910), (89, 10913), (98, 10952), (100, 10967), (102, 10976), (124, 11144), (129, 11171), (178, 11489), (198, 11693), (206, 11738), (207, 11744), (209, 11765), (210, 11777), (224, 11867), (229, 11912), (233, 11939), (236, 11969), (249, 12056), (250, 12059), (254, 12098), (274, 12218), (278, 12260), (283, 12305), (285, 12311), (287, 12326), (293, 12380), (298, 12419), (300, 12440), (301, 12443), (303, 12461), (304, 12470), (314, 12509), (316, 12515), (320, 12536), (324, 12563), (349, 12770), (365, 12836), (378, 12875), (385, 12890), (400, 12920), (401, 12923), (408, 12974), (419, 13055), (420, 13058), (426, 13091), (429, 13121), (431, 13145), (478, 13478), (486, 13526), (489, 13571), (490, 13574), (492, 13589), (501, 13634), (502, 13643), (503, 13652), (510, 13703), (523, 13775), (528, 13793), (536, 13814), (545, 13913), (546, 13916), (553, 13949), (561, 14015), (562, 14033), (564, 14048), (569, 14081), (577, 14132), (586, 14183), (591, 14231), (617, 14426), (618, 14429), (629, 14501), (630, 14504), (638, 14570), (639, 14573), (641, 14591), (649, 14651), (656, 14708), (657, 14726), (666, 14807), (667, 14810), (670, 14825), (686, 14984), (696, 15038), (700, 15104), (709, 15158), (710, 15170), (711, 15176), (725, 15299), (731, 15323), (735, 15341), (738, 15365), (739, 15371), (742, 15392), (749, 15431), (762, 15572), (765, 15584), (772, 15635), (774, 15653), (789, 15803),

Gene: CaramellLatte_16 Start: 9646, Stop: 14433, Start Num: 74

Candidate Starts for CaramellLatte_16:

(Start: 74 @9646 has 16 MA's), (Start: 81 @9673 has 1 MA's), (94, 9751), (106, 9802), (117, 9889), (120, 9904), (128, 9961), (130, 9979), (132, 10006), (134, 10009), (142, 10078), (147, 10135), (157, 10180), (161, 10198), (168, 10243), (176, 10279), (180, 10312), (188, 10360), (189, 10363), (194, 10411), (195, 10450), (197, 10465), (227, 10657), (230, 10675), (244, 10759), (268, 10906), (273, 10933), (283, 11026), (285, 11032), (287, 11047), (291, 11086), (292, 11098), (301, 11164), (316, 11236), (319, 11254), (320, 11257), (324, 11284), (352, 11530), (361, 11596), (370, 11641), (375, 11662), (376, 11665), (377, 11668), (386, 11704), (393, 11743), (395, 11749), (401, 11776), (419, 11905), (420, 11908), (422, 11926), (441, 12049), (443, 12064), (459, 12193), (460, 12214), (468, 12256), (474, 12283), (475, 12289), (495, 12421), (499, 12433), (511, 12520), (519, 12562), (529, 12598), (552, 12724), (557, 12763), (575, 12892), (585, 12949), (592, 12991), (606, 13084), (613, 13159), (624, 13222), (636, 13303), (639, 13324), (662, 13501), (663, 13507), (689, 13726), (697, 13804), (699, 13822), (701, 13828), (711, 13888), (713, 13906), (716, 13939), (725, 14011), (733, 14050), (738, 14080), (749, 14146), (753, 14194), (760, 14254), (771, 14344), (779, 14404),

Gene: CarolAnn_17 Start: 10172, Stop: 15763, Start Num: 4

Candidate Starts for CarolAnn_17:

(Start: 4 @10172 has 38 MA's), (Start: 6 @10187 has 1 MA's), (Start: 9 @10223 has 1 MA's), (10, 10232), (11, 10235), (13, 10277), (33, 10388), (35, 10409), (41, 10529), (56, 10637), (59, 10655), (63, 10676), (64, 10679), (67, 10697), (90, 10811), (98, 10847), (100, 10862), (102, 10871), (124, 11039), (129, 11066), (143, 11183), (173, 11354), (178, 11384), (198, 11588), (206, 11633), (229, 11807), (233, 11834), (236, 11864), (240, 11885), (249, 11951), (250, 11954), (254, 11993), (263, 12056), (274, 12113), (278, 12155), (283, 12200), (285, 12206), (286, 12218), (287, 12221), (293, 12275), (298, 12314), (300, 12335), (301, 12338), (303, 12356), (309, 12383), (314, 12404), (316, 12410), (320, 12431), (324, 12458), (326, 12506), (329, 12536), (353, 12692), (356, 12716), (358, 12725), (360, 12746), (379, 12827), (400, 12923), (401, 12926), (402, 12932), (407, 12974), (408, 12977),

(411, 12998), (419, 13058), (420, 13061), (426, 13094), (429, 13124), (442, 13214), (478, 13481), (486, 13529), (489, 13574), (490, 13577), (492, 13592), (501, 13637), (502, 13646), (503, 13655), (510, 13706), (523, 13778), (528, 13796), (536, 13817), (545, 13916), (546, 13919), (553, 13952), (561, 14018), (562, 14036), (564, 14051), (569, 14084), (577, 14135), (586, 14186), (591, 14234), (617, 14429), (618, 14432), (629, 14504), (630, 14507), (638, 14573), (639, 14576), (641, 14594), (649, 14654), (657, 14729), (667, 14813), (670, 14828), (696, 15041), (703, 15098), (706, 15113), (712, 15161), (717, 15206), (740, 15326), (741, 15335), (748, 15374), (757, 15446), (762, 15515), (772, 15578), (774, 15596), (780, 15653), (789, 15746),

Gene: Carsonalex_17 Start: 9687, Stop: 14825, Start Num: 23

Candidate Starts for Carsonalex_17:

(Start: 17 @9663 has 5 MA's), (Start: 23 @9687 has 36 MA's), (27, 9714), (40, 9843), (43, 9918), (68, 10071), (69, 10074), (87, 10170), (90, 10179), (96, 10209), (98, 10215), (100, 10230), (101, 10233), (105, 10254), (114, 10326), (116, 10347), (126, 10413), (129, 10434), (143, 10551), (170, 10713), (178, 10752), (187, 10827), (209, 11025), (225, 11133), (234, 11211), (236, 11229), (239, 11247), (249, 11316), (251, 11328), (255, 11361), (273, 11472), (274, 11478), (285, 11571), (287, 11586), (303, 11721), (310, 11754), (320, 11796), (330, 11904), (336, 11958), (349, 12030), (350, 12033), (361, 12135), (370, 12180), (372, 12189), (375, 12201), (376, 12204), (377, 12207), (393, 12282), (394, 12285), (395, 12288), (398, 12300), (399, 12309), (401, 12315), (406, 12357), (408, 12366), (415, 12414), (420, 12447), (440, 12582), (456, 12699), (459, 12732), (460, 12753), (474, 12822), (475, 12828), (497, 12963), (499, 12972), (511, 13056), (567, 13377), (602, 13596), (608, 13632), (639, 13845), (673, 14037), (681, 14085), (685, 14106), (699, 14214), (711, 14280), (713, 14298), (719, 14358), (725, 14403), (732, 14433), (733, 14442), (738, 14472), (749, 14538), (753, 14586), (760, 14646), (770, 14733), (779, 14796),

Gene: CheeseSpider_20 Start: 10667, Stop: 16162, Start Num: 9

Candidate Starts for CheeseSpider_20:

(Start: 4 @10616 has 38 MA's), (5, 10628), (Start: 6 @10631 has 1 MA's), (Start: 9 @10667 has 1 MA's), (10, 10676), (11, 10679), (13, 10721), (33, 10832), (35, 10853), (56, 11081), (59, 11099), (63, 11120), (64, 11123), (67, 11141), (73, 11165), (88, 11249), (90, 11255), (98, 11291), (100, 11306), (102, 11315), (124, 11483), (129, 11510), (143, 11627), (173, 11798), (178, 11828), (198, 12032), (206, 12077), (209, 12104), (210, 12116), (224, 12206), (229, 12251), (233, 12278), (236, 12308), (249, 12395), (254, 12437), (256, 12443), (274, 12557), (278, 12599), (283, 12644), (285, 12650), (287, 12665), (293, 12719), (298, 12758), (300, 12779), (301, 12782), (303, 12800), (309, 12827), (316, 12854), (320, 12875), (324, 12902), (365, 13175), (378, 13214), (385, 13229), (400, 13259), (401, 13262), (408, 13313), (420, 13397), (426, 13430), (429, 13460), (431, 13484), (442, 13550), (466, 13739), (478, 13817), (486, 13865), (487, 13898), (489, 13910), (490, 13913), (492, 13928), (493, 13937), (501, 13973), (502, 13982), (503, 13991), (510, 14042), (523, 14114), (528, 14132), (536, 14153), (545, 14252), (546, 14255), (553, 14288), (561, 14354), (562, 14372), (564, 14387), (569, 14420), (577, 14471), (586, 14522), (617, 14765), (618, 14768), (622, 14801), (629, 14840), (630, 14843), (638, 14909), (639, 14912), (649, 14990), (656, 15047), (657, 15065), (666, 15146), (670, 15164), (696, 15377), (700, 15443), (710, 15509), (711, 15515), (725, 15638), (731, 15662), (735, 15680), (738, 15704), (739, 15710), (742, 15731), (749, 15770), (762, 15911), (772, 15974), (780, 16052),

Gene: CheeseTouch_18 Start: 9868, Stop: 15501, Start Num: 16

Candidate Starts for CheeseTouch_18:

(Start: 16 @9868 has 11 MA's), (Start: 26 @9913 has 1 MA's), (28, 9934), (32, 9955), (36, 10000), (Start: 37 @10015 has 1 MA's), (42, 10099), (48, 10141), (49, 10153), (59, 10216), (62, 10231), (64, 10240), (67, 10258), (68, 10264), (80, 10312), (105, 10447), (123, 10597), (129, 10627), (173, 10921), (178, 10951), (195, 11134), (198, 11155), (206, 11200), (207, 11206), (209, 11227), (220, 11308), (229, 11374), (233, 11401), (234, 11413), (236, 11431), (237, 11443), (243, 11467), (246, 11479), (249, 11518), (251, 11530), (254, 11560), (260, 11605), (271, 11665), (274, 11680), (277, 11710),

(278, 11722), (283, 11767), (285, 11773), (286, 11785), (287, 11788), (289, 11809), (292, 11839), (293, 11842), (301, 11905), (304, 11932), (305, 11935), (306, 11938), (307, 11944), (313, 11968), (314, 11971), (316, 11977), (318, 11983), (320, 11998), (323, 12016), (328, 12097), (334, 12145), (335, 12151), (339, 12178), (361, 12337), (362, 12349), (371, 12385), (372, 12391), (384, 12433), (386, 12445), (393, 12484), (395, 12490), (396, 12493), (399, 12511), (400, 12514), (401, 12517), (405, 12541), (415, 12616), (421, 12655), (425, 12679), (429, 12712), (439, 12823), (442, 12856), (447, 12919), (453, 12955), (457, 12985), (466, 13063), (467, 13066), (469, 13075), (473, 13099), (486, 13186), (489, 13231), (490, 13234), (492, 13249), (501, 13294), (502, 13303), (503, 13312), (504, 13315), (521, 13420), (533, 13468), (536, 13474), (545, 13573), (546, 13576), (551, 13588), (564, 13705), (569, 13738), (577, 13789), (584, 13819), (590, 13879), (600, 13960), (605, 13981), (606, 13984), (609, 14014), (619, 14077), (620, 14086), (621, 14095), (639, 14209), (643, 14239), (650, 14287), (651, 14290), (654, 14320), (655, 14341), (677, 14539), (683, 14602), (684, 14608), (694, 14659), (714, 14851), (723, 14938), (728, 14965), (729, 14968), (743, 15043), (747, 15067), (752, 15106), (754, 15142), (759, 15163), (767, 15250), (770, 15292), (775, 15325), (776, 15337), (786, 15415), (790, 15481),

Gene: CherryonLim_17 Start: 10133, Stop: 15220, Start Num: 23

Candidate Starts for CherryonLim_17:

(Start: 23 @10133 has 36 MA's), (40, 10289), (52, 10418), (63, 10490), (68, 10517), (80, 10565), (84, 10574), (87, 10616), (89, 10622), (90, 10625), (98, 10661), (102, 10685), (108, 10712), (118, 10799), (121, 10838), (122, 10844), (126, 10859), (129, 10880), (136, 10934), (152, 11051), (164, 11114), (170, 11159), (182, 11240), (198, 11402), (200, 11411), (201, 11435), (206, 11447), (209, 11474), (210, 11486), (216, 11531), (221, 11561), (223, 11573), (235, 11675), (236, 11678), (249, 11765), (252, 11792), (266, 11882), (270, 11903), (274, 11927), (280, 11978), (285, 12020), (287, 12035), (288, 12044), (289, 12056), (293, 12089), (299, 12131), (307, 12191), (308, 12194), (309, 12197), (310, 12203), (315, 12221), (320, 12245), (325, 12308), (327, 12329), (329, 12350), (338, 12398), (342, 12428), (348, 12455), (349, 12458), (358, 12539), (359, 12551), (361, 12563), (363, 12578), (370, 12608), (375, 12629), (376, 12632), (389, 12692), (394, 12713), (399, 12737), (401, 12743), (413, 12827), (418, 12869), (424, 12899), (429, 12938), (435, 12986), (439, 13007), (440, 13010), (441, 13016), (449, 13082), (456, 13127), (459, 13160), (460, 13181), (471, 13235), (497, 13385), (499, 13394), (511, 13481), (548, 13658), (567, 13799), (573, 13829), (595, 13967), (608, 14048), (632, 14201), (636, 14231), (672, 14441), (673, 14450), (674, 14456), (681, 14492), (699, 14609), (701, 14615), (707, 14657), (711, 14675), (725, 14798), (731, 14822), (733, 14837), (738, 14867), (742, 14894), (744, 14900), (749, 14933), (756, 15002), (758, 15005), (760, 15041), (768, 15113), (771, 15131),

Gene: ChickenTender_18 Start: 9679, Stop: 14817, Start Num: 23

Candidate Starts for ChickenTender_18:

(Start: 23 @9679 has 36 MA's), (27, 9706), (40, 9835), (43, 9910), (68, 10063), (69, 10066), (87, 10162), (90, 10171), (96, 10201), (98, 10207), (100, 10222), (101, 10225), (105, 10246), (114, 10318), (116, 10339), (126, 10405), (129, 10426), (143, 10543), (170, 10705), (178, 10744), (201, 10978), (206, 10990), (209, 11017), (229, 11164), (234, 11203), (243, 11257), (246, 11269), (249, 11308), (253, 11341), (269, 11443), (270, 11446), (274, 11470), (280, 11521), (285, 11563), (287, 11578), (291, 11617), (303, 11713), (312, 11755), (320, 11788), (330, 11896), (336, 11950), (350, 12025), (361, 12127), (370, 12172), (376, 12196), (377, 12199), (389, 12256), (393, 12274), (401, 12307), (404, 12328), (408, 12358), (415, 12406), (416, 12412), (420, 12439), (440, 12574), (456, 12691), (459, 12724), (460, 12745), (474, 12814), (475, 12820), (499, 12964), (511, 13048), (567, 13369), (602, 13588), (606, 13603), (608, 13624), (637, 13825), (639, 13837), (681, 14077), (685, 14098), (699, 14206), (711, 14272), (713, 14290), (725, 14395), (731, 14419), (732, 14425), (733, 14434), (738, 14464), (749, 14530), (753, 14578), (760, 14638), (770, 14725), (779, 14788),

Gene: ChocoMunchkin_16 Start: 9646, Stop: 14433, Start Num: 74

Candidate Starts for ChocoMunchkin_16:

(Start: 74 @9646 has 16 MA's), (Start: 81 @9673 has 1 MA's), (94, 9751), (106, 9802), (117, 9889), (120, 9904), (128, 9961), (130, 9979), (132, 10006), (134, 10009), (142, 10078), (147, 10135), (157, 10180), (161, 10198), (168, 10243), (176, 10279), (180, 10312), (188, 10360), (189, 10363), (194, 10411), (195, 10450), (197, 10465), (227, 10657), (230, 10675), (244, 10759), (268, 10906), (273, 10933), (283, 11026), (285, 11032), (287, 11047), (291, 11086), (292, 11098), (301, 11164), (316, 11236), (319, 11254), (320, 11257), (324, 11284), (352, 11530), (361, 11596), (370, 11641), (375, 11662), (376, 11665), (377, 11668), (386, 11704), (393, 11743), (395, 11749), (401, 11776), (419, 11905), (420, 11908), (422, 11926), (441, 12049), (443, 12064), (459, 12193), (460, 12214), (468, 12256), (474, 12283), (475, 12289), (495, 12421), (499, 12433), (511, 12520), (519, 12562), (529, 12598), (552, 12724), (557, 12763), (575, 12892), (585, 12949), (592, 12991), (606, 13084), (613, 13159), (624, 13222), (636, 13303), (639, 13324), (662, 13501), (663, 13507), (689, 13726), (697, 13804), (699, 13822), (701, 13828), (711, 13888), (713, 13906), (716, 13939), (725, 14011), (733, 14050), (738, 14080), (749, 14146), (753, 14194), (760, 14254), (771, 14344), (779, 14404),

Gene: Cleo_16 Start: 9909, Stop: 15023, Start Num: 23

Candidate Starts for Cleo_16:

(18, 9888), (Start: 23 @9909 has 36 MA's), (27, 9936), (40, 10065), (44, 10149), (46, 10161), (53, 10212), (60, 10245), (65, 10269), (70, 10302), (87, 10392), (100, 10452), (101, 10455), (111, 10521), (115, 10557), (116, 10569), (123, 10626), (126, 10635), (129, 10656), (179, 10995), (188, 11052), (195, 11154), (206, 11220), (207, 11226), (209, 11247), (229, 11394), (236, 11451), (239, 11469), (242, 11484), (246, 11499), (249, 11538), (263, 11643), (268, 11667), (269, 11673), (282, 11784), (285, 11793), (287, 11808), (291, 11847), (303, 11943), (309, 11970), (310, 11976), (311, 11982), (319, 12015), (320, 12018), (330, 12126), (334, 12165), (339, 12198), (343, 12228), (344, 12231), (349, 12252), (350, 12255), (361, 12357), (370, 12402), (376, 12426), (377, 12429), (399, 12531), (400, 12534), (401, 12537), (408, 12588), (415, 12636), (416, 12642), (422, 12687), (440, 12804), (441, 12810), (448, 12867), (456, 12921), (458, 12942), (459, 12954), (460, 12975), (461, 12978), (474, 13044), (475, 13050), (497, 13185), (507, 13251), (511, 13278), (529, 13356), (567, 13596), (573, 13626), (599, 13800), (606, 13830), (608, 13851), (623, 13959), (630, 13995), (636, 14043), (681, 14280), (697, 14391), (699, 14409), (711, 14475), (716, 14526), (725, 14598), (732, 14628), (733, 14637), (734, 14640), (738, 14667), (742, 14694), (749, 14733), (753, 14781), (760, 14841), (763, 14877), (770, 14931),

Gene: CocoaPuff_15 Start: 9378, Stop: 14465, Start Num: 23

Candidate Starts for CocoaPuff_15:

(Start: 23 @9378 has 36 MA's), (40, 9534), (52, 9663), (55, 9693), (68, 9762), (71, 9774), (80, 9810), (84, 9819), (87, 9861), (90, 9870), (98, 9906), (102, 9930), (111, 9990), (118, 10044), (121, 10083), (122, 10089), (126, 10104), (129, 10125), (148, 10284), (152, 10296), (164, 10359), (170, 10404), (182, 10485), (198, 10644), (201, 10677), (206, 10689), (209, 10716), (216, 10773), (221, 10803), (223, 10815), (235, 10917), (236, 10920), (249, 11007), (256, 11055), (274, 11169), (285, 11262), (287, 11277), (289, 11298), (293, 11331), (296, 11361), (299, 11373), (303, 11412), (308, 11436), (309, 11439), (315, 11463), (320, 11487), (329, 11592), (338, 11640), (342, 11670), (346, 11685), (349, 11700), (352, 11739), (358, 11781), (361, 11805), (363, 11820), (366, 11835), (370, 11850), (376, 11874), (386, 11913), (388, 11928), (389, 11934), (394, 11955), (399, 11979), (401, 11985), (418, 12111), (424, 12141), (429, 12180), (435, 12228), (439, 12249), (440, 12252), (449, 12324), (456, 12369), (459, 12402), (460, 12423), (471, 12477), (482, 12552), (499, 12636), (511, 12723), (567, 13041), (573, 13071), (595, 13209), (604, 13260), (608, 13290), (632, 13449), (636, 13479), (669, 13659), (674, 13710), (681, 13737), (685, 13758), (699, 13854), (707, 13902), (711, 13920), (725, 14043), (731, 14067), (733, 14082), (738, 14112), (742, 14139), (744, 14145), (749, 14178), (756, 14247), (758, 14250), (760, 14286), (771, 14376),

Gene: Cozz_16 Start: 9630, Stop: 14768, Start Num: 23

Candidate Starts for Cozz_16:

(Start: 17 @9606 has 5 MA's), (Start: 23 @9630 has 36 MA's), (27, 9657), (40, 9786), (43, 9861), (68, 10014), (69, 10017), (87, 10113), (90, 10122), (96, 10152), (98, 10158), (100, 10173), (101, 10176), (105, 10197), (114, 10269), (116, 10290), (126, 10356), (129, 10377), (143, 10494), (170, 10656), (178, 10695), (187, 10770), (201, 10929), (206, 10941), (209, 10968), (214, 11013), (216, 11025), (229, 11115), (231, 11133), (234, 11154), (237, 11184), (243, 11208), (246, 11220), (249, 11259), (253, 11292), (269, 11394), (270, 11397), (274, 11421), (285, 11514), (287, 11529), (291, 11568), (303, 11664), (311, 11703), (312, 11706), (320, 11739), (330, 11847), (331, 11850), (336, 11901), (350, 11976), (361, 12078), (370, 12123), (375, 12144), (376, 12147), (377, 12150), (393, 12225), (401, 12258), (404, 12279), (415, 12357), (416, 12363), (420, 12390), (440, 12525), (456, 12642), (459, 12675), (460, 12696), (474, 12765), (475, 12771), (477, 12786), (497, 12906), (499, 12915), (511, 12999), (567, 13320), (602, 13539), (608, 13575), (639, 13788), (673, 13980), (681, 14028), (685, 14049), (699, 14157), (711, 14223), (713, 14241), (719, 14301), (725, 14346), (732, 14376), (733, 14385), (738, 14415), (749, 14481), (753, 14529), (760, 14589), (770, 14676), (779, 14739),

Gene: Delian_17 Start: 10277, Stop: 15820, Start Num: 4

Candidate Starts for Delian_17:

(Start: 4 @10277 has 38 MA's), (Start: 6 @10292 has 1 MA's), (Start: 7 @10298 has 1 MA's), (Start: 9 @10328 has 1 MA's), (10, 10337), (11, 10340), (13, 10382), (33, 10493), (35, 10514), (56, 10742), (59, 10760), (62, 10775), (63, 10781), (64, 10784), (67, 10802), (73, 10826), (88, 10910), (89, 10913), (98, 10952), (100, 10967), (102, 10976), (124, 11144), (129, 11171), (178, 11489), (198, 11693), (206, 11738), (207, 11744), (209, 11765), (210, 11777), (224, 11867), (229, 11912), (233, 11939), (236, 11969), (249, 12056), (250, 12059), (254, 12098), (274, 12218), (278, 12260), (283, 12305), (285, 12311), (287, 12326), (293, 12380), (298, 12419), (300, 12440), (301, 12443), (303, 12461), (304, 12470), (314, 12509), (316, 12515), (320, 12536), (324, 12563), (349, 12770), (365, 12836), (378, 12875), (385, 12890), (400, 12920), (401, 12923), (408, 12974), (419, 13055), (420, 13058), (426, 13091), (429, 13121), (431, 13145), (478, 13478), (486, 13526), (489, 13571), (490, 13574), (492, 13589), (501, 13634), (502, 13643), (503, 13652), (510, 13703), (523, 13775), (528, 13793), (536, 13814), (545, 13913), (546, 13916), (553, 13949), (561, 14015), (562, 14033), (564, 14048), (569, 14081), (577, 14132), (586, 14183), (591, 14231), (617, 14426), (618, 14429), (629, 14501), (630, 14504), (638, 14570), (639, 14573), (641, 14591), (649, 14651), (656, 14708), (657, 14726), (666, 14807), (667, 14810), (670, 14825), (686, 14984), (696, 15038), (700, 15104), (709, 15158), (710, 15170), (711, 15176), (725, 15299), (731, 15323), (735, 15341), (738, 15365), (739, 15371), (742, 15392), (749, 15431), (762, 15572), (765, 15584), (772, 15635), (774, 15653), (789, 15803),

Gene: DirtyBoi_18 Start: 11005, Stop: 16017, Start Num: 20

Candidate Starts for DirtyBoi_18:

(Start: 20 @11005 has 13 MA's), (Start: 26 @11035 has 1 MA's), (28, 11056), (34, 11092), (51, 11296), (54, 11326), (69, 11401), (90, 11506), (102, 11566), (112, 11644), (113, 11647), (121, 11719), (129, 11761), (140, 11848), (198, 12277), (201, 12310), (207, 12328), (212, 12373), (215, 12397), (222, 12442), (224, 12451), (228, 12487), (229, 12496), (232, 12520), (234, 12535), (236, 12553), (249, 12640), (257, 12694), (258, 12712), (271, 12787), (276, 12817), (283, 12889), (285, 12895), (287, 12910), (293, 12964), (301, 13027), (303, 13045), (309, 13072), (311, 13084), (316, 13099), (320, 13120), (332, 13240), (334, 13267), (339, 13300), (346, 13339), (349, 13354), (353, 13402), (356, 13426), (360, 13456), (373, 13519), (386, 13564), (387, 13567), (401, 13636), (411, 13708), (414, 13729), (415, 13735), (416, 13741), (419, 13765), (420, 13768), (423, 13789), (427, 13819), (429, 13831), (433, 13867), (443, 13921), (444, 13924), (445, 13930), (450, 13975), (452, 13984), (470, 14125), (476, 14158), (483, 14203), (484, 14209), (485, 14221), (491, 14272), (509, 14356), (513, 14380), (518, 14404), (519, 14407), (534, 14458), (539, 14506), (553, 14593), (556, 14617), (558, 14629), (560, 14650), (563, 14677), (581, 14782), (587, 14815), (595, 14863), (597, 14875), (611, 14947), (615, 14956), (651, 15112), (660, 15142), (690, 15334), (708, 15454), (709, 15457), (730, 15601), (740, 15664), (761, 15826), (762, 15838), (773, 15895), (781, 15970), (782, 15976), (785, 16006), (787, 16009),

Gene: Dre3_16 Start: 9856, Stop: 14970, Start Num: 23

Candidate Starts for Dre3_16:

(18, 9835), (Start: 23 @9856 has 36 MA's), (27, 9883), (40, 10012), (44, 10096), (46, 10108), (53, 10159), (60, 10192), (65, 10216), (70, 10249), (87, 10339), (100, 10399), (101, 10402), (111, 10468), (115, 10504), (116, 10516), (123, 10573), (126, 10582), (129, 10603), (179, 10942), (188, 10999), (195, 11101), (206, 11167), (207, 11173), (209, 11194), (229, 11341), (236, 11398), (239, 11416), (242, 11431), (246, 11446), (249, 11485), (263, 11590), (268, 11614), (269, 11620), (282, 11731), (285, 11740), (287, 11755), (291, 11794), (303, 11890), (309, 11917), (310, 11923), (311, 11929), (319, 11962), (320, 11965), (330, 12073), (334, 12112), (339, 12145), (343, 12175), (344, 12178), (349, 12199), (350, 12202), (361, 12304), (370, 12349), (376, 12373), (377, 12376), (394, 12454), (399, 12478), (400, 12481), (401, 12484), (408, 12535), (415, 12583), (416, 12589), (422, 12634), (440, 12751), (441, 12757), (448, 12814), (456, 12868), (458, 12889), (459, 12901), (460, 12922), (461, 12925), (474, 12991), (475, 12997), (497, 13132), (507, 13198), (511, 13225), (529, 13303), (567, 13543), (573, 13573), (599, 13747), (606, 13777), (608, 13798), (623, 13906), (636, 13990), (681, 14227), (697, 14338), (699, 14356), (711, 14422), (716, 14473), (725, 14545), (733, 14584), (734, 14587), (738, 14614), (742, 14641), (749, 14680), (753, 14728), (760, 14788), (763, 14824), (770, 14878),

Gene: ElJefes_15 Start: 10009, Stop: 14943, Start Num: 40

Candidate Starts for ElJefes_15:

(Start: 23 @9853 has 36 MA's), (40, 10009), (48, 10114), (52, 10138), (59, 10189), (68, 10237), (80, 10285), (84, 10294), (87, 10336), (89, 10342), (90, 10345), (98, 10381), (102, 10405), (108, 10432), (118, 10519), (121, 10558), (122, 10564), (126, 10579), (129, 10600), (136, 10654), (152, 10771), (164, 10834), (170, 10879), (178, 10918), (182, 10960), (198, 11122), (200, 11131), (201, 11155), (206, 11167), (209, 11194), (210, 11206), (216, 11251), (221, 11281), (223, 11293), (235, 11395), (236, 11398), (249, 11485), (252, 11512), (260, 11572), (266, 11602), (270, 11623), (274, 11647), (280, 11698), (285, 11740), (287, 11755), (288, 11764), (289, 11776), (293, 11809), (299, 11851), (307, 11911), (308, 11914), (309, 11917), (315, 11941), (320, 11965), (329, 12070), (338, 12118), (349, 12178), (350, 12181), (352, 12217), (361, 12283), (363, 12298), (366, 12313), (370, 12328), (375, 12349), (376, 12352), (386, 12391), (388, 12406), (389, 12412), (394, 12433), (399, 12457), (401, 12463), (418, 12589), (424, 12619), (429, 12658), (435, 12706), (439, 12727), (440, 12730), (441, 12736), (449, 12802), (456, 12847), (459, 12880), (460, 12901), (471, 12955), (497, 13105), (499, 13114), (511, 13201), (548, 13378), (567, 13519), (573, 13549), (595, 13687), (608, 13768), (632, 13921), (636, 13951), (672, 14173), (673, 14182), (674, 14188), (681, 14215), (699, 14332), (701, 14338), (707, 14380), (711, 14398), (725, 14521), (731, 14545), (733, 14560), (738, 14590), (742, 14617), (744, 14623), (749, 14656), (756, 14725), (758, 14728), (760, 14764), (768, 14836), (771, 14854),

Gene: Elinal_17 Start: 9384, Stop: 14468, Start Num: 23

Candidate Starts for Elinal_17:

(Start: 23 @9384 has 36 MA's), (40, 9540), (52, 9669), (55, 9699), (68, 9768), (71, 9780), (84, 9825), (87, 9867), (90, 9876), (98, 9912), (102, 9936), (118, 10050), (121, 10089), (122, 10095), (123, 10101), (126, 10110), (129, 10131), (152, 10302), (164, 10365), (170, 10410), (182, 10491), (198, 10650), (201, 10683), (206, 10695), (209, 10722), (216, 10779), (221, 10809), (223, 10821), (235, 10923), (236, 10926), (249, 11013), (256, 11061), (274, 11175), (285, 11268), (287, 11283), (289, 11304), (293, 11337), (296, 11367), (299, 11379), (303, 11418), (308, 11442), (309, 11445), (315, 11469), (320, 11493), (329, 11598), (338, 11646), (342, 11676), (346, 11691), (349, 11706), (352, 11745), (358, 11787), (359, 11799), (361, 11811), (363, 11826), (366, 11841), (370, 11856), (376, 11880), (386, 11919), (388, 11934), (389, 11940), (394, 11961), (399, 11985), (401, 11991), (418, 12117), (424, 12147), (430, 12198), (435, 12234), (439, 12255), (440, 12258), (449, 12330), (456, 12375), (459, 12408), (460, 12429), (471, 12483), (482, 12558), (499, 12642), (511, 12729), (550, 12915), (567, 13047), (573, 13077), (595, 13215), (604, 13266), (608, 13296), (632, 13452), (636, 13482), (669, 13662), (674, 13713), (681, 13740), (685, 13761), (699, 13857), (707, 13905), (711, 13923),

(725, 14046), (731, 14070), (733, 14085), (738, 14115), (742, 14142), (744, 14148), (749, 14181),
(756, 14250), (758, 14253), (760, 14289), (771, 14379),

Gene: Elliott_16 Start: 9629, Stop: 14767, Start Num: 23

Candidate Starts for Elliott_16:

(Start: 17 @9605 has 5 MA's), (Start: 23 @9629 has 36 MA's), (27, 9656), (40, 9785), (43, 9860), (68, 10013), (69, 10016), (87, 10112), (90, 10121), (96, 10151), (98, 10157), (100, 10172), (101, 10175), (105, 10196), (114, 10268), (116, 10289), (126, 10355), (129, 10376), (143, 10493), (170, 10655), (178, 10694), (187, 10769), (201, 10928), (206, 10940), (209, 10967), (214, 11012), (216, 11024), (229, 11114), (231, 11132), (234, 11153), (237, 11183), (243, 11207), (246, 11219), (249, 11258), (253, 11291), (269, 11393), (270, 11396), (274, 11420), (285, 11513), (287, 11528), (291, 11567), (311, 11702), (312, 11705), (320, 11738), (330, 11846), (331, 11849), (336, 11900), (350, 11975), (361, 12077), (370, 12122), (375, 12143), (376, 12146), (377, 12149), (393, 12224), (401, 12257), (404, 12278), (408, 12308), (415, 12356), (416, 12362), (420, 12389), (440, 12524), (456, 12641), (459, 12674), (460, 12695), (474, 12764), (475, 12770), (477, 12785), (497, 12905), (499, 12914), (511, 12998), (567, 13319), (602, 13538), (608, 13574), (639, 13787), (673, 13979), (681, 14027), (685, 14048), (699, 14156), (711, 14222), (713, 14240), (725, 14345), (732, 14375), (733, 14384), (738, 14414), (749, 14480), (753, 14528), (760, 14588), (770, 14675), (779, 14738),

Gene: Emalyn_15 Start: 9356, Stop: 14068, Start Num: 74

Candidate Starts for Emalyn_15:

(Start: 74 @9356 has 16 MA's), (106, 9512), (117, 9599), (120, 9614), (125, 9659), (128, 9671), (130, 9689), (132, 9716), (142, 9788), (144, 9830), (147, 9845), (149, 9848), (154, 9872), (157, 9890), (161, 9908), (165, 9929), (168, 9953), (169, 9962), (176, 9989), (180, 10022), (181, 10031), (194, 10121), (195, 10160), (197, 10175), (209, 10244), (213, 10271), (227, 10367), (230, 10385), (240, 10448), (268, 10616), (269, 10622), (283, 10736), (285, 10742), (287, 10757), (316, 10946), (320, 10967), (323, 10985), (324, 10994), (336, 11129), (350, 11204), (352, 11240), (357, 11279), (358, 11282), (361, 11306), (366, 11336), (370, 11351), (376, 11375), (386, 11414), (393, 11453), (395, 11459), (420, 11618), (455, 11867), (456, 11870), (459, 11903), (460, 11924), (474, 11993), (475, 11999), (511, 12230), (539, 12365), (567, 12557), (578, 12626), (583, 12650), (606, 12791), (636, 13004), (639, 13025), (647, 13079), (693, 13382), (697, 13439), (699, 13457), (711, 13523), (718, 13595), (725, 13646), (731, 13670), (732, 13676), (733, 13685), (738, 13715), (749, 13781), (753, 13829), (760, 13889), (771, 13979), (779, 14039),

Gene: Eyes_17 Start: 10596, Stop: 15716, Start Num: 20

Candidate Starts for Eyes_17:

(Start: 20 @10596 has 13 MA's), (Start: 23 @10605 has 36 MA's), (45, 10848), (49, 10878), (51, 10887), (54, 10917), (62, 10956), (67, 10983), (99, 11139), (102, 11157), (121, 11310), (129, 11352), (136, 11406), (170, 11631), (171, 11634), (178, 11670), (188, 11748), (193, 11787), (198, 11871), (201, 11904), (205, 11913), (207, 11922), (210, 11955), (212, 11967), (215, 11991), (222, 12036), (224, 12045), (228, 12081), (233, 12117), (234, 12129), (236, 12147), (243, 12183), (245, 12192), (258, 12306), (265, 12348), (283, 12483), (284, 12486), (285, 12489), (287, 12504), (293, 12558), (298, 12597), (311, 12678), (316, 12693), (320, 12714), (325, 12777), (328, 12813), (353, 12975), (382, 13032), (390, 13044), (391, 13047), (401, 13080), (403, 13098), (414, 13173), (415, 13179), (416, 13185), (418, 13206), (419, 13209), (420, 13212), (429, 13275), (433, 13311), (436, 13326), (441, 13350), (443, 13365), (444, 13368), (445, 13374), (452, 13428), (463, 13527), (470, 13569), (483, 13647), (491, 13716), (496, 13734), (512, 13842), (513, 13845), (518, 13869), (519, 13872), (525, 13893), (531, 13914), (534, 13923), (553, 14058), (556, 14082), (563, 14142), (572, 14202), (581, 14247), (587, 14280), (595, 14328), (597, 14340), (607, 14400), (630, 14550), (633, 14568), (642, 14646), (644, 14652), (646, 14661), (648, 14688), (658, 14781), (664, 14820), (668, 14862), (687, 15015), (694, 15048), (695, 15051), (698, 15108), (702, 15117), (704, 15129), (708, 15150), (711, 15171), (740, 15363), (747, 15402), (758, 15471), (761, 15525), (782, 15678),

Gene: Fairfaxidum_17 Start: 10343, Stop: 15964, Start Num: 4

Candidate Starts for Fairfaxidum_17:

(Start: 3 @10307 has 1 MA's), (Start: 4 @10343 has 38 MA's), (Start: 7 @10364 has 1 MA's), (8, 10382), (11, 10406), (13, 10448), (31, 10547), (33, 10559), (35, 10580), (39, 10637), (42, 10709), (44, 10730), (48, 10751), (51, 10772), (52, 10775), (58, 10823), (59, 10826), (64, 10850), (67, 10868), (80, 10922), (90, 10982), (98, 11018), (99, 11024), (129, 11237), (155, 11423), (173, 11525), (175, 11540), (178, 11555), (184, 11612), (206, 11804), (222, 11924), (233, 12005), (236, 12035), (243, 12071), (249, 12122), (254, 12164), (274, 12284), (280, 12335), (283, 12371), (285, 12377), (287, 12392), (293, 12446), (298, 12485), (301, 12509), (303, 12527), (310, 12560), (314, 12575), (316, 12581), (319, 12599), (320, 12602), (324, 12629), (325, 12665), (358, 12896), (362, 12932), (363, 12935), (371, 12968), (394, 13070), (401, 13103), (410, 13166), (415, 13202), (420, 13238), (424, 13262), (427, 13289), (439, 13370), (447, 13436), (451, 13454), (463, 13559), (469, 13592), (478, 13658), (479, 13667), (486, 13706), (487, 13739), (489, 13751), (490, 13754), (492, 13769), (493, 13778), (501, 13814), (502, 13823), (503, 13832), (518, 13928), (533, 13988), (534, 13991), (536, 13994), (537, 14015), (546, 14096), (554, 14138), (564, 14225), (569, 14258), (570, 14267), (577, 14309), (594, 14423), (617, 14597), (629, 14672), (630, 14675), (634, 14705), (635, 14708), (637, 14732), (638, 14741), (639, 14744), (649, 14822), (656, 14879), (670, 14996), (675, 15047), (696, 15185), (700, 15251), (710, 15317), (711, 15323), (713, 15341), (723, 15434), (725, 15446), (736, 15494), (738, 15512), (739, 15518), (742, 15539), (749, 15578), (762, 15719), (772, 15782), (780, 15857), (789, 15950),

Gene: Feastonyeet_15 Start: 9403, Stop: 14511, Start Num: 23

Candidate Starts for Feastonyeet_15:

(Start: 23 @9403 has 36 MA's), (40, 9559), (52, 9688), (55, 9718), (68, 9787), (71, 9799), (80, 9835), (87, 9886), (90, 9895), (98, 9931), (102, 9955), (111, 10015), (118, 10069), (121, 10108), (122, 10114), (126, 10129), (129, 10150), (152, 10321), (164, 10384), (170, 10429), (182, 10510), (198, 10669), (201, 10702), (206, 10714), (209, 10741), (216, 10798), (221, 10828), (223, 10840), (235, 10942), (236, 10945), (249, 11032), (256, 11080), (274, 11194), (285, 11287), (287, 11302), (289, 11323), (293, 11356), (296, 11386), (299, 11398), (303, 11437), (308, 11461), (309, 11464), (315, 11488), (320, 11512), (329, 11617), (342, 11695), (349, 11725), (350, 11728), (352, 11764), (358, 11806), (361, 11830), (363, 11845), (366, 11860), (370, 11875), (376, 11899), (386, 11938), (388, 11953), (389, 11959), (399, 12004), (401, 12010), (418, 12136), (424, 12166), (428, 12202), (429, 12205), (435, 12253), (439, 12274), (440, 12277), (449, 12349), (456, 12394), (459, 12427), (460, 12448), (471, 12502), (482, 12577), (499, 12661), (511, 12748), (567, 13066), (573, 13096), (595, 13234), (604, 13285), (608, 13315), (632, 13480), (636, 13510), (669, 13690), (674, 13741), (681, 13783), (685, 13804), (699, 13900), (707, 13948), (711, 13966), (725, 14089), (731, 14113), (733, 14128), (738, 14158), (742, 14185), (744, 14191), (749, 14224), (756, 14293), (758, 14296), (760, 14332), (771, 14422),

Gene: Fenry_16 Start: 10023, Stop: 15515, Start Num: 4

Candidate Starts for Fenry_16:

(Start: 4 @10023 has 38 MA's), (Start: 6 @10038 has 1 MA's), (Start: 7 @10044 has 1 MA's), (Start: 9 @10074 has 1 MA's), (10, 10083), (11, 10086), (13, 10128), (33, 10239), (35, 10260), (41, 10380), (56, 10488), (59, 10506), (62, 10521), (63, 10527), (64, 10530), (67, 10548), (73, 10572), (88, 10656), (90, 10662), (98, 10698), (100, 10713), (102, 10722), (124, 10890), (129, 10917), (160, 11130), (178, 11235), (198, 11439), (206, 11484), (209, 11511), (210, 11523), (224, 11613), (229, 11658), (233, 11685), (236, 11715), (249, 11802), (250, 11805), (254, 11844), (274, 11964), (278, 12006), (283, 12051), (285, 12057), (286, 12069), (287, 12072), (293, 12126), (298, 12165), (300, 12186), (301, 12189), (303, 12207), (314, 12255), (316, 12261), (320, 12282), (324, 12309), (328, 12381), (349, 12516), (367, 12588), (369, 12597), (373, 12609), (378, 12621), (385, 12636), (400, 12666), (401, 12669), (408, 12720), (419, 12801), (420, 12804), (426, 12837), (429, 12867), (431, 12891), (442, 12957), (472, 13173), (478, 13224), (486, 13272), (489, 13317), (490, 13320), (492, 13335), (501, 13380), (502, 13389), (503, 13398), (510, 13449), (523, 13521), (528, 13539), (536, 13560), (545,

13659), (546, 13662), (553, 13695), (561, 13761), (562, 13779), (564, 13794), (569, 13827), (577, 13878), (586, 13929), (617, 14172), (618, 14175), (629, 14247), (630, 14250), (638, 14316), (639, 14319), (641, 14337), (649, 14397), (666, 14553), (667, 14556), (670, 14571), (686, 14742), (696, 14796), (703, 14853), (706, 14868), (712, 14916), (717, 14961), (740, 15081), (741, 15090), (748, 15129), (757, 15201), (762, 15270), (765, 15282), (772, 15333), (774, 15351), (789, 15501),

Gene: Fribs8_17 Start: 10424, Stop: 15559, Start Num: 23

Candidate Starts for Fribs8_17:

(Start: 23 @10424 has 36 MA's), (27, 10451), (40, 10580), (46, 10676), (53, 10727), (60, 10760), (65, 10784), (70, 10817), (87, 10907), (100, 10967), (101, 10970), (109, 11030), (111, 11036), (116, 11084), (126, 11150), (129, 11171), (134, 11207), (188, 11567), (195, 11669), (201, 11723), (203, 11726), (206, 11735), (207, 11741), (209, 11762), (229, 11909), (236, 11966), (239, 11984), (243, 12002), (246, 12014), (249, 12053), (256, 12101), (263, 12158), (268, 12182), (269, 12188), (282, 12299), (285, 12308), (287, 12323), (291, 12362), (300, 12437), (309, 12485), (310, 12491), (320, 12533), (330, 12641), (334, 12680), (339, 12713), (361, 12872), (370, 12917), (376, 12941), (394, 13022), (399, 13046), (400, 13049), (401, 13052), (403, 13070), (408, 13103), (414, 13145), (420, 13184), (427, 13235), (440, 13319), (441, 13325), (448, 13382), (450, 13394), (456, 13436), (458, 13457), (459, 13469), (460, 13490), (461, 13493), (474, 13559), (477, 13580), (497, 13700), (507, 13766), (511, 13793), (520, 13838), (522, 13859), (532, 13880), (567, 14123), (573, 14153), (578, 14192), (599, 14327), (606, 14357), (608, 14378), (636, 14570), (673, 14783), (676, 14801), (681, 14816), (697, 14927), (699, 14945), (711, 15011), (716, 15062), (723, 15122), (725, 15134), (733, 15173), (734, 15176), (738, 15203), (744, 15236), (749, 15269), (770, 15467), (772, 15473), (779, 15530),

Gene: Frickyeah_18 Start: 9926, Stop: 15508, Start Num: 26

Candidate Starts for Frickyeah_18:

(Start: 16 @9881 has 11 MA's), (Start: 26 @9926 has 1 MA's), (28, 9947), (32, 9968), (36, 10013), (Start: 37 @10028 has 1 MA's), (42, 10112), (48, 10154), (49, 10166), (59, 10229), (62, 10244), (64, 10253), (67, 10271), (68, 10277), (80, 10325), (105, 10460), (123, 10610), (129, 10640), (178, 10964), (191, 11060), (198, 11168), (206, 11213), (207, 11219), (209, 11240), (220, 11321), (229, 11387), (233, 11414), (234, 11426), (236, 11444), (237, 11456), (243, 11480), (246, 11492), (249, 11531), (250, 11534), (251, 11543), (254, 11573), (260, 11618), (271, 11678), (274, 11693), (277, 11723), (278, 11735), (283, 11780), (285, 11786), (287, 11801), (290, 11831), (292, 11852), (293, 11855), (301, 11918), (304, 11945), (305, 11948), (306, 11951), (307, 11957), (313, 11981), (314, 11984), (316, 11990), (318, 11996), (320, 12011), (323, 12029), (325, 12074), (334, 12158), (335, 12164), (339, 12191), (352, 12284), (353, 12293), (361, 12350), (362, 12362), (371, 12398), (372, 12404), (384, 12446), (386, 12458), (393, 12497), (395, 12503), (396, 12506), (399, 12524), (400, 12527), (401, 12530), (405, 12554), (415, 12629), (421, 12668), (425, 12692), (429, 12725), (439, 12836), (442, 12869), (447, 12932), (453, 12968), (457, 12998), (466, 13076), (467, 13079), (469, 13088), (473, 13112), (485, 13193), (486, 13199), (489, 13244), (490, 13247), (492, 13262), (501, 13307), (502, 13316), (503, 13325), (504, 13328), (521, 13433), (533, 13481), (534, 13484), (536, 13487), (545, 13586), (546, 13589), (551, 13601), (564, 13718), (569, 13751), (577, 13802), (584, 13832), (590, 13892), (600, 13973), (605, 13994), (609, 14027), (620, 14099), (621, 14108), (639, 14222), (643, 14252), (645, 14261), (650, 14300), (651, 14303), (654, 14333), (655, 14354), (677, 14552), (683, 14615), (684, 14621), (694, 14672), (714, 14858), (723, 14945), (728, 14972), (729, 14975), (743, 15050), (747, 15074), (752, 15113), (754, 15149), (759, 15170), (767, 15257), (770, 15299), (775, 15332), (776, 15344), (786, 15422), (790, 15488),

Gene: Frokostdame_17 Start: 10288, Stop: 15762, Start Num: 6

Candidate Starts for Frokostdame_17:

(Start: 4 @10273 has 38 MA's), (5, 10285), (Start: 6 @10288 has 1 MA's), (Start: 7 @10294 has 1 MA's), (Start: 9 @10324 has 1 MA's), (10, 10333), (13, 10378), (33, 10489), (35, 10510), (41, 10630), (46, 10672), (56, 10738), (59, 10756), (63, 10777), (64, 10780), (67, 10798), (73, 10822), (88, 10906),

(98, 10948), (100, 10963), (102, 10972), (124, 11140), (129, 11167), (143, 11284), (152, 11338), (160, 11380), (178, 11485), (198, 11689), (206, 11734), (207, 11740), (209, 11761), (210, 11773), (224, 11863), (229, 11908), (233, 11935), (236, 11965), (249, 12052), (250, 12055), (254, 12094), (263, 12157), (265, 12166), (274, 12214), (278, 12256), (285, 12307), (287, 12322), (293, 12376), (298, 12415), (300, 12436), (301, 12439), (303, 12457), (309, 12484), (314, 12505), (316, 12511), (320, 12532), (323, 12550), (324, 12559), (365, 12832), (373, 12859), (378, 12871), (385, 12886), (400, 12916), (401, 12919), (408, 12970), (414, 13012), (419, 13051), (420, 13054), (426, 13087), (429, 13117), (431, 13141), (442, 13207), (478, 13474), (486, 13522), (487, 13555), (489, 13567), (490, 13570), (492, 13585), (501, 13630), (502, 13639), (503, 13648), (510, 13699), (523, 13771), (528, 13789), (536, 13810), (545, 13909), (546, 13912), (553, 13945), (561, 14011), (562, 14029), (564, 14044), (569, 14077), (577, 14128), (586, 14179), (617, 14422), (618, 14425), (629, 14497), (630, 14500), (638, 14566), (639, 14569), (641, 14587), (649, 14647), (656, 14704), (657, 14722), (666, 14803), (667, 14806), (670, 14821), (686, 14992), (696, 15046), (706, 15118), (707, 15127), (712, 15163), (720, 15223), (722, 15241), (726, 15259), (737, 15304), (741, 15337), (757, 15448), (762, 15517), (772, 15580), (774, 15598), (789, 15748),

Gene: GEazy_17 Start: 10605, Stop: 15728, Start Num: 20

Candidate Starts for GEazy_17:

(Start: 20 @10605 has 13 MA's), (Start: 23 @10614 has 36 MA's), (49, 10887), (51, 10896), (54, 10926), (84, 11055), (102, 11166), (110, 11223), (129, 11361), (136, 11415), (140, 11448), (173, 11649), (178, 11679), (188, 11757), (191, 11775), (193, 11796), (198, 11880), (201, 11913), (205, 11922), (207, 11931), (210, 11964), (212, 11976), (215, 12000), (222, 12045), (224, 12054), (228, 12090), (229, 12099), (233, 12126), (234, 12138), (236, 12156), (243, 12192), (258, 12315), (265, 12357), (283, 12492), (284, 12495), (285, 12498), (287, 12513), (293, 12567), (298, 12606), (311, 12687), (316, 12702), (320, 12723), (322, 12738), (324, 12750), (325, 12786), (328, 12822), (353, 12984), (382, 13041), (390, 13053), (391, 13056), (401, 13089), (403, 13107), (414, 13182), (415, 13188), (416, 13194), (418, 13215), (419, 13218), (420, 13221), (429, 13284), (433, 13320), (436, 13335), (441, 13359), (443, 13374), (444, 13377), (452, 13437), (463, 13536), (470, 13578), (483, 13656), (491, 13725), (496, 13743), (512, 13851), (518, 13878), (519, 13881), (530, 13920), (531, 13923), (534, 13932), (539, 13980), (553, 14067), (556, 14091), (563, 14151), (572, 14211), (587, 14289), (595, 14337), (597, 14349), (607, 14409), (610, 14451), (625, 14532), (630, 14559), (633, 14577), (636, 14607), (642, 14655), (644, 14661), (646, 14670), (653, 14718), (658, 14790), (664, 14829), (668, 14871), (694, 15057), (695, 15060), (698, 15117), (702, 15126), (704, 15138), (708, 15159), (740, 15372), (747, 15411), (758, 15480), (761, 15534), (773, 15606), (782, 15687), (784, 15711),

Gene: GTE2_14 Start: 9463, Stop: 14106, Start Num: 106

Candidate Starts for GTE2_14:

(Start: 74 @9307 has 16 MA's), (Start: 81 @9334 has 1 MA's), (94, 9412), (106, 9463), (117, 9550), (120, 9565), (128, 9622), (130, 9640), (132, 9667), (134, 9670), (142, 9739), (147, 9796), (157, 9841), (161, 9859), (168, 9904), (176, 9940), (180, 9973), (188, 10021), (189, 10024), (194, 10072), (195, 10111), (197, 10126), (227, 10318), (230, 10336), (244, 10420), (268, 10567), (273, 10594), (283, 10687), (285, 10693), (287, 10708), (291, 10747), (301, 10825), (316, 10897), (319, 10915), (320, 10918), (336, 11080), (350, 11155), (352, 11191), (361, 11257), (370, 11302), (375, 11323), (376, 11326), (377, 11329), (386, 11365), (393, 11404), (395, 11410), (399, 11431), (401, 11437), (409, 11497), (419, 11566), (420, 11569), (422, 11587), (441, 11710), (443, 11725), (459, 11854), (460, 11875), (466, 11908), (474, 11944), (475, 11950), (495, 12082), (499, 12094), (511, 12181), (543, 12334), (552, 12385), (557, 12424), (575, 12553), (585, 12610), (592, 12655), (606, 12748), (613, 12823), (624, 12886), (636, 12967), (639, 12988), (662, 13174), (663, 13180), (689, 13399), (697, 13477), (699, 13495), (701, 13501), (711, 13561), (713, 13579), (716, 13612), (725, 13684), (733, 13723), (738, 13753), (749, 13819), (753, 13867), (760, 13927), (771, 14017), (779, 14077),

Gene: Gambino_19 Start: 10619, Stop: 16108, Start Num: 4

Candidate Starts for Gambino_19:

(Start: 4 @10619 has 38 MA's), (Start: 6 @10634 has 1 MA's), (Start: 7 @10640 has 1 MA's), (Start: 9 @10670 has 1 MA's), (10, 10679), (11, 10682), (13, 10724), (33, 10835), (35, 10856), (41, 10976), (46, 11018), (56, 11084), (59, 11102), (63, 11123), (64, 11126), (67, 11144), (73, 11168), (88, 11252), (98, 11294), (100, 11309), (102, 11318), (124, 11486), (129, 11513), (143, 11630), (173, 11801), (178, 11831), (198, 12035), (206, 12080), (209, 12107), (210, 12119), (212, 12131), (224, 12209), (229, 12254), (233, 12281), (236, 12311), (249, 12398), (250, 12401), (254, 12440), (263, 12503), (265, 12512), (274, 12560), (278, 12602), (283, 12647), (285, 12653), (287, 12668), (293, 12722), (298, 12761), (300, 12782), (301, 12785), (303, 12803), (309, 12830), (314, 12851), (316, 12857), (320, 12878), (323, 12896), (324, 12905), (365, 13178), (385, 13232), (400, 13262), (401, 13265), (408, 13316), (419, 13397), (420, 13400), (426, 13433), (429, 13463), (431, 13487), (442, 13553), (478, 13820), (486, 13868), (487, 13901), (489, 13913), (490, 13916), (501, 13976), (502, 13985), (503, 13994), (510, 14045), (523, 14117), (528, 14135), (536, 14156), (545, 14255), (546, 14258), (553, 14291), (561, 14357), (562, 14375), (564, 14390), (569, 14423), (577, 14474), (586, 14525), (594, 14594), (617, 14768), (618, 14771), (629, 14843), (630, 14846), (638, 14912), (639, 14915), (641, 14933), (649, 14993), (656, 15050), (657, 15068), (666, 15149), (667, 15152), (670, 15167), (686, 15338), (696, 15392), (706, 15464), (707, 15473), (712, 15509), (720, 15569), (722, 15587), (726, 15605), (737, 15650), (741, 15683), (757, 15794), (762, 15863), (772, 15926), (774, 15944), (789, 16094),

Gene: Getalong_19 Start: 10672, Stop: 16305, Start Num: 17

Candidate Starts for Getalong_19:

(Start: 17 @10672 has 5 MA's), (Start: 26 @10717 has 1 MA's), (28, 10738), (32, 10759), (36, 10804), (Start: 37 @10819 has 1 MA's), (42, 10903), (48, 10945), (49, 10957), (59, 11020), (62, 11035), (64, 11044), (67, 11062), (68, 11068), (80, 11116), (105, 11251), (123, 11401), (129, 11431), (160, 11650), (173, 11725), (178, 11755), (198, 11959), (206, 12004), (207, 12010), (209, 12031), (212, 12055), (220, 12112), (229, 12178), (233, 12205), (234, 12217), (236, 12235), (237, 12247), (243, 12271), (246, 12283), (249, 12322), (250, 12325), (251, 12334), (254, 12364), (260, 12409), (271, 12469), (274, 12484), (277, 12514), (278, 12526), (283, 12571), (285, 12577), (287, 12592), (290, 12622), (292, 12643), (293, 12646), (301, 12709), (304, 12736), (305, 12739), (306, 12742), (307, 12748), (313, 12772), (314, 12775), (316, 12781), (318, 12787), (320, 12802), (323, 12820), (325, 12865), (334, 12949), (335, 12955), (339, 12982), (352, 13075), (353, 13084), (361, 13141), (362, 13153), (371, 13189), (372, 13195), (384, 13237), (386, 13249), (393, 13288), (395, 13294), (396, 13297), (399, 13315), (400, 13318), (401, 13321), (415, 13420), (421, 13459), (425, 13483), (429, 13516), (439, 13627), (442, 13660), (447, 13723), (453, 13759), (457, 13789), (466, 13867), (467, 13870), (469, 13879), (473, 13903), (486, 13990), (489, 14035), (490, 14038), (492, 14053), (501, 14098), (502, 14107), (503, 14116), (504, 14119), (521, 14224), (533, 14272), (536, 14278), (545, 14377), (546, 14380), (551, 14392), (564, 14509), (569, 14542), (577, 14593), (584, 14623), (590, 14683), (600, 14764), (605, 14785), (606, 14788), (609, 14818), (619, 14881), (620, 14890), (621, 14899), (639, 15013), (643, 15043), (650, 15091), (651, 15094), (654, 15124), (655, 15145), (677, 15343), (683, 15406), (684, 15412), (694, 15463), (714, 15655), (723, 15742), (728, 15769), (729, 15772), (743, 15847), (747, 15871), (752, 15910), (754, 15946), (759, 15967), (767, 16054), (770, 16096), (775, 16129), (776, 16141), (790, 16285),

Gene: GiKK_19 Start: 9920, Stop: 14137, Start Num: 72

Candidate Starts for GiKK_19:

(Start: 72 @9920 has 7 MA's), (Start: 78 @9947 has 1 MA's), (118, 10193), (126, 10256), (133, 10313), (138, 10340), (141, 10382), (149, 10445), (153, 10460), (156, 10478), (159, 10496), (162, 10508), (167, 10541), (174, 10583), (177, 10598), (191, 10694), (192, 10703), (196, 10766), (198, 10781), (204, 10817), (211, 10868), (217, 10901), (218, 10910), (230, 10991), (238, 11057), (241, 11066), (242, 11075), (247, 11096), (266, 11231), (268, 11243), (287, 11384), (289, 11405), (293, 11438), (294, 11456), (297, 11474), (303, 11519), (316, 11573), (318, 11579), (320, 11594), (338, 11657), (347, 11705), (350, 11720), (352, 11756), (381, 11810), (393, 11837), (394, 11840), (395, 11843),

(400, 11867), (401, 11870), (409, 11930), (419, 11999), (420, 12002), (422, 12020), (427, 12053), (433, 12104), (439, 12134), (443, 12158), (444, 12161), (459, 12287), (460, 12308), (462, 12317), (464, 12326), (465, 12332), (488, 12485), (506, 12554), (508, 12560), (514, 12596), (548, 12725), (567, 12866), (571, 12890), (578, 12935), (603, 13088), (604, 13091), (632, 13283), (636, 13313), (691, 13487), (703, 13559), (710, 13595), (713, 13619), (715, 13631), (718, 13673), (724, 13715), (725, 13721), (731, 13745), (735, 13763), (738, 13784), (742, 13811), (744, 13817), (749, 13850), (751, 13871), (753, 13898), (758, 13922), (760, 13958), (766, 14006), (779, 14108),

Gene: Gibbous_16 Start: 9856, Stop: 14970, Start Num: 23

Candidate Starts for Gibbous_16:

(18, 9835), (Start: 23 @9856 has 36 MA's), (27, 9883), (40, 10012), (44, 10096), (46, 10108), (53, 10159), (60, 10192), (65, 10216), (70, 10249), (87, 10339), (100, 10399), (101, 10402), (111, 10468), (115, 10504), (116, 10516), (123, 10573), (126, 10582), (129, 10603), (179, 10942), (188, 10999), (195, 11101), (206, 11167), (207, 11173), (209, 11194), (229, 11341), (236, 11398), (239, 11416), (242, 11431), (246, 11446), (249, 11485), (263, 11590), (268, 11614), (269, 11620), (282, 11731), (285, 11740), (287, 11755), (291, 11794), (303, 11890), (309, 11917), (310, 11923), (311, 11929), (319, 11962), (320, 11965), (330, 12073), (334, 12112), (339, 12145), (343, 12175), (344, 12178), (349, 12199), (350, 12202), (361, 12304), (370, 12349), (376, 12373), (377, 12376), (394, 12454), (399, 12478), (400, 12481), (401, 12484), (408, 12535), (415, 12583), (416, 12589), (422, 12634), (440, 12751), (441, 12757), (448, 12814), (456, 12868), (458, 12889), (459, 12901), (460, 12922), (461, 12925), (474, 12991), (475, 12997), (497, 13132), (507, 13198), (511, 13225), (529, 13303), (567, 13543), (573, 13573), (599, 13747), (606, 13777), (608, 13798), (623, 13906), (636, 13990), (681, 14227), (697, 14338), (699, 14356), (711, 14422), (716, 14473), (725, 14545), (733, 14584), (734, 14587), (738, 14614), (742, 14641), (749, 14680), (753, 14728), (760, 14788), (763, 14824), (770, 14878),

Gene: GoldHunter_17 Start: 9630, Stop: 14768, Start Num: 23

Candidate Starts for GoldHunter_17:

(Start: 17 @9606 has 5 MA's), (Start: 23 @9630 has 36 MA's), (27, 9657), (40, 9786), (43, 9861), (68, 10014), (69, 10017), (87, 10113), (90, 10122), (96, 10152), (98, 10158), (100, 10173), (101, 10176), (105, 10197), (114, 10269), (116, 10290), (126, 10356), (129, 10377), (143, 10494), (170, 10656), (178, 10695), (187, 10770), (201, 10929), (206, 10941), (209, 10968), (214, 11013), (216, 11025), (229, 11115), (231, 11133), (234, 11154), (237, 11184), (243, 11208), (246, 11220), (249, 11259), (253, 11292), (269, 11394), (270, 11397), (274, 11421), (285, 11514), (287, 11529), (291, 11568), (298, 11622), (303, 11664), (312, 11706), (319, 11736), (320, 11739), (330, 11847), (331, 11850), (336, 11901), (350, 11976), (359, 12066), (361, 12078), (370, 12123), (375, 12144), (376, 12147), (377, 12150), (393, 12225), (401, 12258), (404, 12279), (408, 12309), (415, 12357), (416, 12363), (420, 12390), (440, 12525), (456, 12642), (459, 12675), (460, 12696), (461, 12699), (474, 12765), (475, 12771), (477, 12786), (497, 12906), (499, 12915), (511, 12999), (567, 13320), (602, 13539), (608, 13575), (639, 13788), (673, 13980), (681, 14028), (685, 14049), (699, 14157), (711, 14223), (713, 14241), (719, 14301), (725, 14346), (732, 14376), (733, 14385), (738, 14415), (749, 14481), (753, 14529), (760, 14589), (770, 14676), (779, 14739),

Gene: Guacamole_17 Start: 10278, Stop: 15800, Start Num: 4

Candidate Starts for Guacamole_17:

(Start: 4 @10278 has 38 MA's), (Start: 6 @10293 has 1 MA's), (Start: 7 @10299 has 1 MA's), (Start: 9 @10329 has 1 MA's), (10, 10338), (11, 10341), (13, 10383), (33, 10494), (35, 10515), (41, 10635), (46, 10677), (56, 10743), (59, 10761), (63, 10782), (64, 10785), (67, 10803), (73, 10827), (88, 10911), (89, 10914), (98, 10953), (100, 10968), (102, 10977), (124, 11145), (129, 11172), (143, 11289), (151, 11337), (173, 11460), (178, 11490), (198, 11694), (206, 11739), (209, 11766), (210, 11778), (224, 11868), (229, 11913), (233, 11940), (236, 11970), (249, 12057), (250, 12060), (254, 12099), (267, 12183), (274, 12219), (278, 12261), (283, 12306), (285, 12312), (286, 12324), (287, 12327), (293, 12381), (298, 12420), (300, 12441), (301, 12444), (303, 12462), (304, 12471), (309, 12489), (314,

12510), (316, 12516), (320, 12537), (324, 12564), (329, 12642), (369, 12831), (378, 12855), (384, 12867), (385, 12870), (397, 12885), (400, 12900), (401, 12903), (408, 12954), (419, 13035), (420, 13038), (426, 13071), (429, 13101), (431, 13125), (454, 13284), (478, 13458), (486, 13506), (489, 13551), (490, 13554), (492, 13569), (501, 13614), (502, 13623), (503, 13632), (510, 13683), (523, 13755), (528, 13773), (536, 13794), (545, 13893), (546, 13896), (553, 13929), (561, 13995), (562, 14013), (564, 14028), (569, 14061), (577, 14112), (586, 14163), (591, 14211), (617, 14406), (618, 14409), (629, 14481), (630, 14484), (638, 14550), (639, 14553), (641, 14571), (649, 14631), (656, 14688), (657, 14706), (666, 14787), (667, 14790), (670, 14805), (696, 15018), (700, 15084), (709, 15138), (710, 15150), (711, 15156), (725, 15279), (731, 15303), (735, 15321), (738, 15345), (739, 15351), (742, 15372), (749, 15411), (762, 15552), (765, 15564), (772, 15615), (774, 15633), (789, 15783),

Gene: HannahD_17 Start: 10605, Stop: 15728, Start Num: 20

Candidate Starts for HannahD_17:

(Start: 20 @10605 has 13 MA's), (Start: 23 @10614 has 36 MA's), (49, 10887), (51, 10896), (54, 10926), (84, 11055), (102, 11166), (110, 11223), (129, 11361), (136, 11415), (140, 11448), (173, 11649), (178, 11679), (188, 11757), (191, 11775), (193, 11796), (198, 11880), (201, 11913), (205, 11922), (207, 11931), (210, 11964), (212, 11976), (215, 12000), (222, 12045), (224, 12054), (228, 12090), (229, 12099), (233, 12126), (234, 12138), (236, 12156), (243, 12192), (258, 12315), (265, 12357), (283, 12492), (284, 12495), (285, 12498), (287, 12513), (293, 12567), (298, 12606), (311, 12687), (316, 12702), (320, 12723), (322, 12738), (324, 12750), (325, 12786), (328, 12822), (353, 12984), (382, 13041), (390, 13053), (391, 13056), (401, 13089), (403, 13107), (414, 13182), (415, 13188), (416, 13194), (418, 13215), (419, 13218), (420, 13221), (429, 13284), (433, 13320), (436, 13335), (441, 13359), (443, 13374), (444, 13377), (452, 13437), (463, 13536), (470, 13578), (483, 13656), (491, 13725), (496, 13743), (512, 13851), (518, 13878), (519, 13881), (530, 13920), (531, 13923), (534, 13932), (539, 13980), (553, 14067), (556, 14091), (563, 14151), (572, 14211), (587, 14289), (595, 14337), (597, 14349), (607, 14409), (610, 14451), (625, 14532), (630, 14559), (633, 14577), (636, 14607), (642, 14655), (644, 14661), (646, 14670), (653, 14718), (658, 14790), (664, 14829), (668, 14871), (694, 15057), (695, 15060), (698, 15117), (702, 15126), (704, 15138), (708, 15159), (740, 15372), (747, 15411), (758, 15480), (761, 15534), (773, 15606), (782, 15687), (784, 15711),

Gene: Hedwig_18 Start: 11001, Stop: 16013, Start Num: 20

Candidate Starts for Hedwig_18:

(Start: 20 @11001 has 13 MA's), (Start: 26 @11031 has 1 MA's), (28, 11052), (34, 11088), (51, 11292), (54, 11322), (69, 11397), (90, 11502), (102, 11562), (112, 11640), (113, 11643), (121, 11715), (129, 11757), (140, 11844), (198, 12273), (200, 12282), (201, 12306), (207, 12324), (212, 12369), (215, 12393), (222, 12438), (224, 12447), (228, 12483), (229, 12492), (232, 12516), (234, 12531), (236, 12549), (241, 12573), (249, 12636), (257, 12690), (258, 12708), (271, 12783), (276, 12813), (283, 12885), (285, 12891), (287, 12906), (289, 12927), (293, 12960), (301, 13023), (303, 13041), (309, 13068), (311, 13080), (316, 13095), (320, 13116), (332, 13236), (334, 13263), (339, 13296), (346, 13335), (349, 13350), (353, 13398), (356, 13422), (360, 13452), (373, 13515), (386, 13560), (387, 13563), (401, 13632), (411, 13704), (414, 13725), (415, 13731), (416, 13737), (419, 13761), (420, 13764), (423, 13785), (427, 13815), (429, 13827), (433, 13863), (443, 13917), (444, 13920), (445, 13926), (450, 13971), (452, 13980), (470, 14121), (476, 14154), (483, 14199), (484, 14205), (485, 14217), (491, 14268), (509, 14352), (513, 14376), (518, 14400), (519, 14403), (534, 14454), (539, 14502), (553, 14589), (556, 14613), (558, 14625), (560, 14646), (563, 14673), (581, 14778), (587, 14811), (595, 14859), (597, 14871), (611, 14943), (615, 14952), (651, 15108), (660, 15138), (690, 15330), (708, 15450), (709, 15453), (730, 15597), (740, 15660), (761, 15822), (762, 15834), (773, 15891), (781, 15966), (782, 15972), (785, 16002), (787, 16005),

Gene: Hexbug_18 Start: 10603, Stop: 14823, Start Num: 72

Candidate Starts for Hexbug_18:

(Start: 72 @10603 has 7 MA's), (Start: 78 @10630 has 1 MA's), (126, 10939), (133, 10996), (137, 11020), (141, 11065), (142, 11068), (144, 11110), (149, 11128), (153, 11143), (156, 11161), (157, 11170), (167, 11224), (177, 11281), (189, 11362), (194, 11410), (196, 11449), (198, 11464), (200, 11473), (204, 11500), (208, 11530), (209, 11533), (211, 11551), (230, 11674), (238, 11740), (248, 11803), (261, 11890), (274, 11959), (286, 12064), (287, 12067), (289, 12088), (293, 12121), (294, 12139), (297, 12157), (300, 12181), (303, 12202), (304, 12211), (316, 12256), (317, 12259), (320, 12277), (347, 12388), (349, 12400), (350, 12403), (352, 12439), (369, 12481), (381, 12493), (393, 12520), (401, 12553), (412, 12628), (419, 12682), (420, 12685), (422, 12703), (429, 12748), (433, 12787), (434, 12793), (439, 12817), (442, 12838), (443, 12841), (444, 12844), (459, 12970), (460, 12991), (462, 13000), (464, 13009), (465, 13015), (488, 13168), (500, 13213), (506, 13237), (508, 13243), (514, 13279), (521, 13312), (526, 13336), (542, 13387), (549, 13432), (567, 13570), (572, 13600), (632, 13981), (691, 14173), (703, 14245), (710, 14281), (713, 14305), (715, 14317), (718, 14359), (725, 14407), (738, 14470), (744, 14503), (749, 14536), (751, 14557), (753, 14584), (758, 14608), (760, 14644), (762, 14671), (764, 14680), (766, 14692), (779, 14794),

Gene: HippoPololi_18 Start: 10513, Stop: 15630, Start Num: 23

Candidate Starts for HippoPololi_18:

(18, 10492), (Start: 23 @10513 has 36 MA's), (27, 10540), (40, 10669), (44, 10753), (50, 10792), (53, 10816), (65, 10873), (69, 10900), (70, 10906), (87, 10996), (100, 11056), (101, 11059), (111, 11125), (116, 11173), (126, 11239), (129, 11260), (179, 11599), (187, 11653), (188, 11656), (195, 11758), (203, 11815), (205, 11821), (206, 11824), (207, 11830), (209, 11851), (224, 11953), (236, 12055), (239, 12073), (249, 12142), (256, 12190), (263, 12247), (268, 12271), (269, 12277), (285, 12397), (287, 12412), (291, 12451), (300, 12526), (303, 12547), (309, 12574), (310, 12580), (319, 12619), (320, 12622), (330, 12730), (339, 12802), (349, 12856), (361, 12961), (370, 13006), (376, 13030), (394, 13111), (400, 13138), (401, 13141), (408, 13192), (415, 13240), (416, 13246), (422, 13291), (440, 13408), (441, 13414), (448, 13471), (456, 13525), (458, 13546), (459, 13558), (460, 13579), (461, 13582), (474, 13648), (475, 13654), (497, 13789), (499, 13798), (507, 13855), (511, 13882), (535, 13975), (567, 14203), (570, 14224), (573, 14233), (599, 14407), (606, 14437), (608, 14458), (636, 14650), (661, 14740), (681, 14887), (685, 14908), (699, 15016), (705, 15049), (711, 15082), (716, 15133), (725, 15205), (733, 15244), (734, 15247), (738, 15274), (744, 15307), (749, 15340), (751, 15361), (753, 15388), (763, 15484), (770, 15538),

Gene: Hitter_17 Start: 10274, Stop: 15796, Start Num: 4

Candidate Starts for Hitter_17:

(Start: 4 @10274 has 38 MA's), (Start: 6 @10289 has 1 MA's), (Start: 7 @10295 has 1 MA's), (Start: 9 @10325 has 1 MA's), (10, 10334), (11, 10337), (13, 10379), (33, 10490), (35, 10511), (56, 10739), (59, 10757), (62, 10772), (63, 10778), (64, 10781), (67, 10799), (73, 10823), (88, 10907), (90, 10913), (98, 10949), (100, 10964), (102, 10973), (124, 11141), (129, 11168), (143, 11285), (173, 11456), (178, 11486), (198, 11690), (206, 11735), (229, 11909), (233, 11936), (236, 11966), (249, 12053), (254, 12095), (267, 12179), (274, 12215), (278, 12257), (283, 12302), (285, 12308), (286, 12320), (287, 12323), (293, 12377), (298, 12416), (300, 12437), (301, 12440), (303, 12458), (304, 12467), (309, 12485), (314, 12506), (316, 12512), (320, 12533), (324, 12560), (329, 12638), (369, 12827), (378, 12851), (384, 12863), (385, 12866), (397, 12881), (400, 12896), (401, 12899), (408, 12950), (419, 13031), (420, 13034), (426, 13067), (429, 13097), (431, 13121), (478, 13454), (486, 13502), (489, 13547), (490, 13550), (492, 13565), (501, 13610), (502, 13619), (503, 13628), (510, 13679), (523, 13751), (528, 13769), (536, 13790), (545, 13889), (546, 13892), (553, 13925), (561, 13991), (562, 14009), (564, 14024), (569, 14057), (577, 14108), (586, 14159), (617, 14402), (618, 14405), (629, 14477), (630, 14480), (638, 14546), (639, 14549), (641, 14567), (649, 14627), (656, 14684), (657, 14702), (666, 14783), (667, 14786), (670, 14801), (696, 15014), (700, 15080), (701, 15086), (710, 15146), (711, 15152), (725, 15275), (731, 15299), (735, 15317), (738, 15341), (739, 15347), (742, 15368), (749, 15407), (762, 15548), (765, 15560), (772, 15611), (774, 15629), (789, 15779),

Gene: Holliday_18 Start: 9868, Stop: 15501, Start Num: 16

Candidate Starts for Holliday_18:

(Start: 16 @9868 has 11 MA's), (24, 9895), (Start: 26 @9913 has 1 MA's), (28, 9934), (32, 9955), (36, 10000), (Start: 37 @10015 has 1 MA's), (42, 10099), (48, 10141), (49, 10153), (59, 10216), (62, 10231), (64, 10240), (67, 10258), (68, 10264), (80, 10312), (105, 10447), (123, 10597), (129, 10627), (160, 10846), (173, 10921), (178, 10951), (198, 11155), (205, 11197), (206, 11200), (207, 11206), (209, 11227), (220, 11308), (229, 11374), (233, 11401), (234, 11413), (236, 11431), (237, 11443), (243, 11467), (246, 11479), (249, 11518), (250, 11521), (251, 11530), (254, 11560), (260, 11605), (271, 11665), (274, 11680), (277, 11710), (278, 11722), (283, 11767), (285, 11773), (287, 11788), (290, 11818), (292, 11839), (293, 11842), (301, 11905), (304, 11932), (305, 11935), (306, 11938), (307, 11944), (313, 11968), (314, 11971), (316, 11977), (318, 11983), (320, 11998), (323, 12016), (328, 12097), (334, 12145), (335, 12151), (339, 12178), (361, 12337), (362, 12349), (371, 12385), (386, 12445), (393, 12484), (395, 12490), (396, 12493), (400, 12514), (401, 12517), (415, 12616), (421, 12655), (425, 12679), (429, 12712), (432, 12757), (438, 12811), (446, 12898), (447, 12919), (453, 12955), (457, 12985), (466, 13063), (467, 13066), (469, 13075), (473, 13099), (485, 13180), (486, 13186), (489, 13231), (490, 13234), (492, 13249), (501, 13294), (502, 13303), (503, 13312), (504, 13315), (521, 13420), (533, 13468), (536, 13474), (545, 13573), (546, 13576), (551, 13588), (564, 13705), (569, 13738), (577, 13789), (579, 13801), (584, 13819), (590, 13879), (600, 13960), (605, 13981), (609, 14014), (619, 14077), (621, 14095), (639, 14209), (643, 14239), (645, 14248), (650, 14287), (651, 14290), (654, 14320), (655, 14341), (671, 14494), (677, 14545), (683, 14608), (684, 14614), (694, 14665), (714, 14851), (723, 14938), (728, 14965), (729, 14968), (743, 15043), (747, 15067), (752, 15106), (754, 15142), (759, 15163), (767, 15250), (770, 15292), (775, 15325), (776, 15337), (786, 15415), (790, 15481),

Gene: Horseradish_17 Start: 9515, Stop: 14311, Start Num: 74

Candidate Starts for Horseradish_17:

(Start: 74 @9515 has 16 MA's), (Start: 81 @9542 has 1 MA's), (83, 9548), (106, 9671), (120, 9773), (125, 9818), (128, 9830), (130, 9848), (132, 9875), (134, 9878), (135, 9893), (141, 9944), (142, 9947), (147, 10004), (149, 10007), (150, 10010), (157, 10049), (161, 10067), (168, 10112), (176, 10148), (180, 10181), (185, 10214), (186, 10226), (194, 10280), (195, 10319), (197, 10334), (199, 10343), (202, 10370), (211, 10421), (221, 10481), (223, 10490), (230, 10544), (240, 10607), (243, 10622), (251, 10685), (268, 10775), (273, 10802), (283, 10895), (285, 10901), (287, 10916), (291, 10955), (301, 11033), (306, 11066), (316, 11105), (319, 11123), (320, 11126), (324, 11153), (327, 11210), (329, 11231), (345, 11342), (350, 11363), (352, 11399), (358, 11441), (359, 11453), (361, 11465), (370, 11510), (371, 11513), (375, 11531), (376, 11534), (377, 11537), (393, 11612), (401, 11645), (409, 11705), (418, 11771), (419, 11774), (420, 11777), (422, 11795), (436, 11894), (439, 11909), (440, 11912), (459, 12062), (460, 12083), (468, 12125), (474, 12152), (475, 12158), (495, 12290), (499, 12302), (511, 12389), (519, 12431), (529, 12467), (538, 12503), (543, 12542), (552, 12593), (557, 12632), (565, 12710), (575, 12761), (585, 12818), (606, 12956), (613, 13028), (636, 13172), (639, 13193), (662, 13370), (663, 13376), (699, 13700), (701, 13706), (711, 13766), (713, 13784), (716, 13817), (725, 13889), (733, 13928), (738, 13958), (749, 14024), (750, 14042), (753, 14072), (760, 14132), (771, 14222), (779, 14282),

Gene: Horus_18 Start: 9926, Stop: 15514, Start Num: 26

Candidate Starts for Horus_18:

(Start: 16 @9881 has 11 MA's), (Start: 26 @9926 has 1 MA's), (28, 9947), (32, 9968), (36, 10013), (Start: 37 @10028 has 1 MA's), (42, 10112), (48, 10154), (49, 10166), (59, 10229), (62, 10244), (64, 10253), (67, 10271), (68, 10277), (80, 10325), (105, 10460), (123, 10610), (129, 10640), (178, 10964), (191, 11060), (198, 11168), (205, 11210), (206, 11213), (207, 11219), (209, 11240), (220, 11321), (229, 11387), (233, 11414), (234, 11426), (236, 11444), (237, 11456), (243, 11480), (246, 11492), (249, 11531), (250, 11534), (251, 11543), (254, 11573), (271, 11678), (274, 11693), (277, 11723), (278, 11735), (283, 11780), (285, 11786), (287, 11801), (290, 11831), (292, 11852), (293, 11855), (301, 11918), (304, 11945), (305, 11948), (306, 11951), (307, 11957), (313, 11981), (314, 11984), (316, 11990), (318, 11996), (320, 12011), (323, 12029), (325, 12074), (334, 12158), (335, 12164),

(339, 12191), (352, 12284), (353, 12293), (361, 12350), (362, 12362), (371, 12398), (384, 12446), (386, 12458), (393, 12497), (395, 12503), (396, 12506), (399, 12524), (400, 12527), (401, 12530), (405, 12554), (415, 12629), (425, 12692), (429, 12725), (433, 12800), (438, 12824), (439, 12836), (442, 12869), (447, 12932), (453, 12968), (457, 12998), (466, 13076), (467, 13079), (469, 13088), (486, 13199), (489, 13244), (490, 13247), (492, 13262), (501, 13307), (502, 13316), (503, 13325), (504, 13328), (521, 13433), (533, 13481), (536, 13487), (545, 13586), (546, 13589), (551, 13601), (564, 13718), (569, 13751), (577, 13802), (584, 13832), (590, 13892), (600, 13973), (605, 13994), (606, 13997), (609, 14027), (619, 14090), (620, 14099), (621, 14108), (639, 14222), (643, 14252), (650, 14300), (651, 14303), (654, 14333), (655, 14354), (677, 14552), (683, 14615), (684, 14621), (694, 14672), (714, 14864), (723, 14951), (728, 14978), (729, 14981), (743, 15056), (747, 15080), (752, 15119), (754, 15155), (759, 15176), (767, 15263), (770, 15305), (775, 15338), (776, 15350), (790, 15494),

Gene: Jalammah_19 Start: 11050, Stop: 16590, Start Num: 4

Candidate Starts for Jalammah_19:

(Start: 4 @11050 has 38 MA's), (Start: 9 @11101 has 1 MA's), (10, 11110), (11, 11113), (13, 11155), (33, 11266), (35, 11287), (41, 11407), (46, 11449), (56, 11515), (59, 11533), (63, 11554), (64, 11557), (67, 11575), (73, 11599), (88, 11683), (98, 11725), (100, 11740), (102, 11749), (124, 11917), (129, 11944), (143, 12061), (173, 12232), (178, 12262), (198, 12466), (206, 12511), (209, 12538), (210, 12550), (224, 12640), (229, 12685), (233, 12712), (236, 12742), (249, 12829), (250, 12832), (254, 12871), (267, 12955), (274, 12991), (278, 13033), (283, 13078), (285, 13084), (286, 13096), (287, 13099), (293, 13153), (298, 13192), (300, 13213), (301, 13216), (303, 13234), (309, 13261), (314, 13282), (316, 13288), (320, 13309), (324, 13336), (350, 13546), (369, 13624), (378, 13648), (384, 13660), (385, 13663), (397, 13678), (400, 13693), (401, 13696), (408, 13747), (419, 13828), (420, 13831), (426, 13864), (429, 13894), (431, 13918), (442, 13984), (478, 14251), (486, 14299), (489, 14344), (490, 14347), (492, 14362), (501, 14407), (502, 14416), (503, 14425), (510, 14476), (523, 14548), (528, 14566), (536, 14587), (545, 14686), (546, 14689), (553, 14722), (561, 14788), (562, 14806), (564, 14821), (569, 14854), (577, 14905), (586, 14956), (617, 15199), (618, 15202), (629, 15274), (630, 15277), (638, 15343), (639, 15346), (641, 15364), (649, 15424), (656, 15481), (657, 15499), (666, 15580), (667, 15583), (670, 15598), (686, 15757), (696, 15811), (700, 15877), (701, 15883), (710, 15943), (711, 15949), (715, 15979), (725, 16072), (731, 16096), (735, 16114), (738, 16138), (739, 16144), (742, 16165), (749, 16204), (762, 16345), (765, 16357), (772, 16408), (774, 16426), (789, 16576),

Gene: Jamzy_19 Start: 9930, Stop: 14147, Start Num: 72

Candidate Starts for Jamzy_19:

(Start: 72 @9930 has 7 MA's), (Start: 78 @9957 has 1 MA's), (118, 10203), (126, 10266), (133, 10323), (138, 10350), (141, 10392), (149, 10455), (153, 10470), (156, 10488), (159, 10506), (162, 10518), (167, 10551), (174, 10593), (177, 10608), (191, 10704), (192, 10713), (196, 10776), (198, 10791), (204, 10827), (211, 10878), (217, 10911), (218, 10920), (230, 11001), (238, 11067), (241, 11076), (242, 11085), (247, 11106), (266, 11241), (268, 11253), (287, 11394), (289, 11415), (293, 11448), (294, 11466), (297, 11484), (303, 11529), (316, 11583), (320, 11604), (338, 11667), (347, 11715), (350, 11730), (352, 11766), (381, 11820), (393, 11847), (395, 11853), (400, 11877), (401, 11880), (409, 11940), (414, 11973), (420, 12012), (422, 12030), (423, 12033), (429, 12075), (430, 12087), (434, 12120), (435, 12123), (439, 12144), (443, 12168), (444, 12171), (456, 12264), (458, 12285), (459, 12297), (460, 12318), (462, 12327), (464, 12336), (465, 12342), (488, 12495), (505, 12555), (506, 12564), (508, 12570), (514, 12606), (549, 12738), (567, 12876), (571, 12900), (603, 13098), (604, 13101), (627, 13263), (631, 13287), (632, 13290), (665, 13392), (691, 13497), (703, 13569), (707, 13593), (710, 13605), (713, 13629), (715, 13641), (724, 13725), (725, 13731), (735, 13773), (738, 13794), (744, 13827), (749, 13860), (751, 13881), (753, 13908), (760, 13968), (762, 13995), (764, 14004), (766, 14016), (779, 14118),

Gene: JasperJr_17 Start: 10278, Stop: 15800, Start Num: 4

Candidate Starts for JasperJr_17:

(Start: 4 @10278 has 38 MA's), (Start: 6 @10293 has 1 MA's), (Start: 7 @10299 has 1 MA's), (Start: 9 @10329 has 1 MA's), (10, 10338), (11, 10341), (13, 10383), (33, 10494), (35, 10515), (41, 10635), (46, 10677), (56, 10743), (59, 10761), (63, 10782), (64, 10785), (67, 10803), (73, 10827), (88, 10911), (89, 10914), (98, 10953), (100, 10968), (102, 10977), (124, 11145), (129, 11172), (143, 11289), (151, 11337), (173, 11460), (178, 11490), (198, 11694), (206, 11739), (209, 11766), (210, 11778), (224, 11868), (229, 11913), (233, 11940), (236, 11970), (249, 12057), (250, 12060), (254, 12099), (267, 12183), (274, 12219), (278, 12261), (283, 12306), (285, 12312), (286, 12324), (287, 12327), (293, 12381), (298, 12420), (300, 12441), (301, 12444), (303, 12462), (304, 12471), (309, 12489), (314, 12510), (316, 12516), (320, 12537), (324, 12564), (329, 12642), (369, 12831), (378, 12855), (384, 12867), (385, 12870), (397, 12885), (400, 12900), (401, 12903), (408, 12954), (419, 13035), (420, 13038), (426, 13071), (429, 13101), (431, 13125), (454, 13284), (478, 13458), (486, 13506), (489, 13551), (490, 13554), (492, 13569), (501, 13614), (502, 13623), (503, 13632), (510, 13683), (523, 13755), (528, 13773), (536, 13794), (545, 13893), (546, 13896), (553, 13929), (561, 13995), (562, 14013), (564, 14028), (569, 14061), (577, 14112), (586, 14163), (591, 14211), (617, 14406), (618, 14409), (629, 14481), (630, 14484), (638, 14550), (639, 14553), (641, 14571), (649, 14631), (656, 14688), (657, 14706), (666, 14787), (667, 14790), (670, 14805), (696, 15018), (700, 15084), (709, 15138), (710, 15150), (711, 15156), (725, 15279), (731, 15303), (735, 15321), (738, 15345), (739, 15351), (742, 15372), (749, 15411), (762, 15552), (765, 15564), (772, 15615), (774, 15633), (789, 15783),

Gene: Jecs_18 Start: 10920, Stop: 16037, Start Num: 20

Candidate Starts for Jecs_18:

(Start: 20 @10920 has 13 MA's), (Start: 23 @10929 has 36 MA's), (49, 11202), (51, 11211), (54, 11241), (57, 11250), (67, 11307), (73, 11331), (93, 11442), (99, 11463), (102, 11481), (121, 11634), (123, 11646), (129, 11676), (170, 11955), (171, 11958), (178, 11994), (188, 12072), (198, 12195), (201, 12228), (207, 12246), (210, 12279), (212, 12291), (215, 12315), (222, 12360), (224, 12369), (228, 12405), (233, 12441), (234, 12453), (236, 12471), (243, 12507), (258, 12630), (262, 12654), (265, 12672), (283, 12807), (285, 12813), (287, 12828), (293, 12882), (295, 12909), (296, 12912), (298, 12921), (300, 12942), (301, 12945), (303, 12963), (304, 12972), (314, 13011), (316, 13017), (320, 13038), (324, 13065), (326, 13113), (329, 13143), (342, 13221), (350, 13254), (353, 13299), (382, 13356), (390, 13368), (391, 13371), (401, 13404), (415, 13503), (416, 13509), (418, 13530), (419, 13533), (420, 13536), (422, 13554), (429, 13599), (433, 13635), (441, 13674), (443, 13689), (444, 13692), (445, 13698), (450, 13743), (452, 13752), (463, 13851), (470, 13893), (483, 13971), (491, 14040), (496, 14058), (512, 14166), (513, 14169), (518, 14193), (519, 14196), (525, 14217), (530, 14235), (531, 14238), (534, 14247), (555, 14400), (556, 14406), (572, 14526), (587, 14604), (595, 14652), (597, 14664), (607, 14724), (625, 14844), (630, 14871), (633, 14889), (642, 14967), (644, 14973), (646, 14982), (648, 15009), (658, 15102), (664, 15141), (668, 15183), (687, 15336), (694, 15369), (695, 15372), (698, 15429), (702, 15438), (704, 15450), (708, 15471), (740, 15684), (747, 15723), (758, 15792), (761, 15846), (782, 15999),

Gene: JuJu_17 Start: 10202, Stop: 15721, Start Num: 4

Candidate Starts for JuJu_17:

(Start: 4 @10202 has 38 MA's), (Start: 6 @10217 has 1 MA's), (Start: 7 @10223 has 1 MA's), (Start: 9 @10253 has 1 MA's), (10, 10262), (11, 10265), (13, 10307), (33, 10418), (35, 10439), (59, 10685), (63, 10706), (64, 10709), (67, 10727), (73, 10751), (88, 10835), (90, 10841), (98, 10877), (100, 10892), (102, 10901), (105, 10916), (111, 10961), (124, 11069), (129, 11096), (132, 11129), (178, 11414), (198, 11618), (206, 11663), (229, 11837), (233, 11864), (236, 11894), (249, 11981), (254, 12023), (265, 12095), (274, 12143), (278, 12185), (283, 12230), (285, 12236), (286, 12248), (287, 12251), (293, 12305), (298, 12344), (300, 12365), (301, 12368), (303, 12386), (304, 12395), (309, 12413), (314, 12434), (316, 12440), (320, 12461), (324, 12488), (329, 12566), (349, 12674), (365, 12740), (378, 12779), (400, 12824), (401, 12827), (408, 12878), (419, 12959), (420, 12962), (426, 12995), (429, 13025), (442, 13115), (453, 13196), (469, 13316), (478, 13382), (486, 13430), (489, 13475),

(490, 13478), (492, 13493), (493, 13502), (501, 13538), (502, 13547), (503, 13556), (523, 13679), (536, 13718), (545, 13817), (546, 13820), (561, 13919), (562, 13937), (564, 13952), (569, 13985), (577, 14036), (586, 14087), (594, 14156), (617, 14330), (618, 14333), (628, 14399), (629, 14405), (630, 14408), (638, 14474), (639, 14477), (641, 14495), (649, 14555), (656, 14612), (657, 14630), (666, 14711), (670, 14729), (675, 14780), (686, 14888), (696, 14942), (700, 15008), (709, 15062), (710, 15074), (711, 15080), (715, 15110), (725, 15203), (731, 15227), (735, 15245), (738, 15269), (739, 15275), (742, 15296), (749, 15335), (762, 15476), (772, 15539), (774, 15557), (780, 15614), (789, 15707),

Gene: Kamaru_18 Start: 9868, Stop: 15501, Start Num: 16

Candidate Starts for Kamaru_18:

(Start: 16 @9868 has 11 MA's), (24, 9895), (Start: 26 @9913 has 1 MA's), (28, 9934), (32, 9955), (36, 10000), (Start: 37 @10015 has 1 MA's), (42, 10099), (48, 10141), (49, 10153), (59, 10216), (62, 10231), (64, 10240), (67, 10258), (68, 10264), (80, 10312), (105, 10447), (123, 10597), (129, 10627), (160, 10846), (173, 10921), (178, 10951), (198, 11155), (205, 11197), (206, 11200), (207, 11206), (209, 11227), (220, 11308), (229, 11374), (233, 11401), (234, 11413), (236, 11431), (237, 11443), (243, 11467), (246, 11479), (249, 11518), (250, 11521), (251, 11530), (254, 11560), (260, 11605), (271, 11665), (274, 11680), (277, 11710), (278, 11722), (283, 11767), (285, 11773), (287, 11788), (290, 11818), (292, 11839), (293, 11842), (301, 11905), (304, 11932), (305, 11935), (306, 11938), (307, 11944), (313, 11968), (314, 11971), (316, 11977), (318, 11983), (320, 11998), (323, 12016), (328, 12097), (334, 12145), (335, 12151), (339, 12178), (361, 12337), (362, 12349), (371, 12385), (386, 12445), (393, 12484), (395, 12490), (396, 12493), (400, 12514), (401, 12517), (415, 12616), (421, 12655), (425, 12679), (429, 12712), (432, 12757), (438, 12811), (446, 12898), (447, 12919), (453, 12955), (457, 12985), (466, 13063), (467, 13066), (469, 13075), (473, 13099), (485, 13180), (486, 13186), (489, 13231), (490, 13234), (492, 13249), (501, 13294), (502, 13303), (503, 13312), (504, 13315), (521, 13420), (533, 13468), (536, 13474), (545, 13573), (546, 13576), (551, 13588), (564, 13705), (569, 13738), (577, 13789), (579, 13801), (584, 13819), (590, 13879), (600, 13960), (605, 13981), (609, 14014), (619, 14077), (621, 14095), (639, 14209), (643, 14239), (645, 14248), (650, 14287), (651, 14290), (654, 14320), (655, 14341), (671, 14494), (677, 14545), (683, 14608), (684, 14614), (694, 14665), (714, 14851), (723, 14938), (728, 14965), (729, 14968), (743, 15043), (747, 15067), (752, 15106), (754, 15142), (759, 15163), (767, 15250), (770, 15292), (775, 15325), (776, 15337), (786, 15415), (790, 15481),

Gene: KappaFarmDelta_17 Start: 10424, Stop: 15964, Start Num: 4

Candidate Starts for KappaFarmDelta_17:

(Start: 4 @10424 has 38 MA's), (Start: 6 @10439 has 1 MA's), (Start: 7 @10445 has 1 MA's), (Start: 9 @10475 has 1 MA's), (10, 10484), (11, 10487), (13, 10529), (33, 10640), (35, 10661), (56, 10889), (59, 10907), (63, 10928), (64, 10931), (67, 10949), (73, 10973), (88, 11057), (90, 11063), (98, 11099), (100, 11114), (102, 11123), (124, 11291), (129, 11318), (143, 11435), (173, 11606), (178, 11636), (198, 11840), (206, 11885), (209, 11912), (229, 12059), (233, 12086), (236, 12116), (249, 12203), (250, 12206), (254, 12245), (256, 12251), (274, 12365), (278, 12407), (283, 12452), (285, 12458), (286, 12470), (287, 12473), (293, 12527), (298, 12566), (300, 12587), (301, 12590), (303, 12608), (309, 12635), (314, 12656), (316, 12662), (320, 12683), (324, 12710), (328, 12782), (365, 12983), (369, 12998), (378, 13022), (385, 13037), (400, 13067), (401, 13070), (408, 13121), (420, 13205), (426, 13238), (431, 13292), (466, 13547), (478, 13625), (486, 13673), (487, 13706), (489, 13718), (490, 13721), (492, 13736), (493, 13745), (501, 13781), (502, 13790), (503, 13799), (521, 13907), (533, 13955), (534, 13958), (536, 13961), (537, 13982), (546, 14063), (547, 14066), (564, 14192), (569, 14225), (576, 14273), (577, 14276), (580, 14291), (586, 14327), (617, 14570), (618, 14573), (629, 14645), (630, 14648), (638, 14714), (639, 14717), (641, 14735), (649, 14795), (656, 14852), (657, 14870), (666, 14951), (670, 14969), (696, 15182), (700, 15248), (710, 15314), (711, 15320), (715, 15350), (725, 15443), (731, 15467), (738, 15509), (742, 15536), (749, 15575), (762, 15716), (772, 15779), (774, 15797), (780, 15854),

Gene: KayGee_16 Start: 9384, Stop: 14468, Start Num: 23

Candidate Starts for KayGee_16:

(Start: 23 @9384 has 36 MA's), (40, 9540), (52, 9669), (55, 9699), (68, 9768), (71, 9780), (84, 9825), (87, 9867), (90, 9876), (98, 9912), (102, 9936), (118, 10050), (121, 10089), (122, 10095), (123, 10101), (126, 10110), (129, 10131), (152, 10302), (164, 10365), (170, 10410), (182, 10491), (198, 10650), (201, 10683), (206, 10695), (209, 10722), (216, 10779), (221, 10809), (223, 10821), (235, 10923), (236, 10926), (249, 11013), (256, 11061), (274, 11175), (285, 11268), (287, 11283), (289, 11304), (293, 11337), (296, 11367), (299, 11379), (303, 11418), (308, 11442), (309, 11445), (315, 11469), (320, 11493), (329, 11598), (338, 11646), (342, 11676), (346, 11691), (349, 11706), (352, 11745), (358, 11787), (359, 11799), (361, 11811), (363, 11826), (366, 11841), (370, 11856), (376, 11880), (386, 11919), (388, 11934), (389, 11940), (394, 11961), (399, 11985), (401, 11991), (418, 12117), (424, 12147), (430, 12198), (435, 12234), (439, 12255), (440, 12258), (449, 12330), (456, 12375), (459, 12408), (460, 12429), (471, 12483), (482, 12558), (499, 12642), (511, 12729), (550, 12915), (567, 13047), (573, 13077), (595, 13215), (604, 13266), (608, 13296), (632, 13452), (636, 13482), (669, 13662), (674, 13713), (681, 13740), (685, 13761), (699, 13857), (707, 13905), (711, 13923), (725, 14046), (731, 14070), (733, 14085), (738, 14115), (742, 14142), (744, 14148), (749, 14181), (756, 14250), (758, 14253), (760, 14289), (771, 14379),

Gene: Kenna_17 Start: 9881, Stop: 15508, Start Num: 16

Candidate Starts for Kenna_17:

(Start: 16 @9881 has 11 MA's), (24, 9908), (Start: 26 @9926 has 1 MA's), (28, 9947), (32, 9968), (36, 10013), (Start: 37 @10028 has 1 MA's), (42, 10112), (48, 10154), (49, 10166), (59, 10229), (62, 10244), (64, 10253), (67, 10271), (68, 10277), (80, 10325), (105, 10460), (123, 10610), (129, 10640), (178, 10964), (191, 11060), (198, 11168), (206, 11213), (207, 11219), (209, 11240), (212, 11264), (220, 11321), (229, 11387), (233, 11414), (234, 11426), (236, 11444), (237, 11456), (243, 11480), (246, 11492), (249, 11531), (250, 11534), (251, 11543), (254, 11573), (260, 11618), (271, 11678), (274, 11693), (277, 11723), (278, 11735), (283, 11780), (285, 11786), (287, 11801), (290, 11831), (292, 11852), (293, 11855), (301, 11918), (304, 11945), (305, 11948), (306, 11951), (307, 11957), (313, 11981), (314, 11984), (316, 11990), (318, 11996), (320, 12011), (323, 12029), (325, 12074), (334, 12158), (335, 12164), (339, 12191), (352, 12284), (353, 12293), (361, 12350), (362, 12362), (371, 12398), (372, 12404), (384, 12446), (386, 12458), (393, 12497), (395, 12503), (396, 12506), (399, 12524), (400, 12527), (401, 12530), (405, 12554), (415, 12629), (421, 12668), (425, 12692), (429, 12725), (439, 12836), (442, 12869), (447, 12932), (453, 12968), (457, 12998), (466, 13076), (467, 13079), (469, 13088), (473, 13112), (485, 13193), (486, 13199), (489, 13244), (490, 13247), (492, 13262), (501, 13307), (502, 13316), (503, 13325), (504, 13328), (521, 13433), (533, 13481), (534, 13484), (536, 13487), (545, 13586), (546, 13589), (551, 13601), (564, 13718), (569, 13751), (577, 13802), (584, 13832), (590, 13892), (600, 13973), (605, 13994), (609, 14027), (620, 14099), (621, 14108), (639, 14222), (643, 14252), (645, 14261), (650, 14300), (651, 14303), (654, 14333), (655, 14354), (677, 14552), (683, 14615), (684, 14621), (694, 14672), (714, 14858), (723, 14945), (728, 14972), (729, 14975), (743, 15050), (747, 15074), (752, 15113), (754, 15149), (759, 15170), (767, 15257), (770, 15299), (775, 15332), (776, 15344), (786, 15422), (790, 15488),

Gene: Kiko_18 Start: 10875, Stop: 15764, Start Num: 20

Candidate Starts for Kiko_18:

(Start: 20 @10875 has 13 MA's), (25, 10899), (34, 10962), (38, 11019), (43, 11115), (45, 11127), (47, 11142), (51, 11166), (54, 11196), (77, 11307), (79, 11313), (80, 11316), (82, 11322), (84, 11325), (85, 11337), (90, 11376), (99, 11418), (101, 11430), (109, 11490), (114, 11523), (121, 11589), (126, 11610), (129, 11631), (136, 11685), (140, 11718), (158, 11835), (170, 11910), (173, 11919), (178, 11949), (188, 12027), (198, 12147), (205, 12189), (207, 12198), (210, 12231), (212, 12243), (215, 12267), (216, 12276), (224, 12321), (228, 12357), (229, 12366), (231, 12384), (236, 12423), (243, 12459), (245, 12468), (249, 12510), (258, 12582), (269, 12645), (280, 12723), (282, 12756), (283, 12759), (285, 12765), (287, 12780), (289, 12801), (292, 12831), (293, 12834), (299, 12876), (304, 12924), (309, 12942), (310, 12948), (314, 12963), (316, 12969), (319, 12987), (320, 12990), (324,

13017), (326, 13065), (327, 13074), (332, 13110), (333, 13113), (339, 13170), (343, 13200), (349, 13224), (353, 13272), (356, 13296), (358, 13305), (360, 13326), (383, 13416), (399, 13500), (401, 13506), (427, 13557), (433, 13605), (436, 13620), (441, 13644), (442, 13656), (443, 13659), (444, 13662), (445, 13668), (450, 13713), (452, 13722), (470, 13863), (476, 13896), (483, 13941), (512, 14136), (513, 14139), (515, 14145), (530, 14205), (534, 14217), (547, 14322), (556, 14376), (561, 14412), (563, 14436), (596, 14637), (616, 14727), (640, 14844), (651, 14886), (692, 15093), (695, 15102), (702, 15168), (708, 15201), (740, 15411), (761, 15573), (762, 15585), (773, 15642), (783, 15726), (785, 15753),

Gene: Lauer_15 Start: 9433, Stop: 14517, Start Num: 23

Candidate Starts for Lauer_15:

(Start: 23 @9433 has 36 MA's), (40, 9589), (52, 9718), (55, 9748), (68, 9817), (71, 9829), (87, 9916), (90, 9925), (98, 9961), (102, 9985), (111, 10045), (118, 10099), (121, 10138), (122, 10144), (126, 10159), (129, 10180), (152, 10351), (164, 10414), (170, 10459), (182, 10540), (198, 10699), (201, 10732), (206, 10744), (209, 10771), (216, 10828), (221, 10858), (223, 10870), (235, 10972), (236, 10975), (249, 11062), (256, 11110), (274, 11224), (285, 11317), (287, 11332), (289, 11353), (293, 11386), (296, 11416), (299, 11428), (303, 11467), (308, 11491), (309, 11494), (315, 11518), (320, 11542), (329, 11647), (342, 11725), (349, 11755), (350, 11758), (352, 11794), (358, 11836), (361, 11860), (363, 11875), (366, 11890), (370, 11905), (376, 11929), (386, 11968), (388, 11983), (389, 11989), (394, 12010), (399, 12034), (401, 12040), (418, 12166), (424, 12196), (429, 12235), (435, 12283), (439, 12304), (440, 12307), (449, 12379), (456, 12424), (459, 12457), (460, 12478), (471, 12532), (482, 12607), (499, 12691), (511, 12778), (550, 12964), (567, 13096), (573, 13126), (595, 13264), (604, 13315), (608, 13345), (632, 13501), (636, 13531), (669, 13711), (674, 13762), (681, 13789), (685, 13810), (699, 13906), (707, 13954), (711, 13972), (725, 14095), (731, 14119), (733, 14134), (738, 14164), (742, 14191), (744, 14197), (749, 14230), (756, 14299), (758, 14302), (760, 14338), (771, 14428),

Gene: Leroy_18 Start: 9882, Stop: 15515, Start Num: 16

Candidate Starts for Leroy_18:

(Start: 16 @9882 has 11 MA's), (Start: 26 @9927 has 1 MA's), (28, 9948), (32, 9969), (36, 10014), (Start: 37 @10029 has 1 MA's), (42, 10113), (48, 10155), (49, 10167), (59, 10230), (62, 10245), (64, 10254), (67, 10272), (68, 10278), (80, 10326), (105, 10461), (123, 10611), (129, 10641), (173, 10935), (178, 10965), (198, 11169), (205, 11211), (206, 11214), (207, 11220), (209, 11241), (212, 11265), (220, 11322), (229, 11388), (233, 11415), (234, 11427), (236, 11445), (237, 11457), (243, 11481), (246, 11493), (249, 11532), (250, 11535), (251, 11544), (254, 11574), (256, 11580), (271, 11679), (274, 11694), (277, 11724), (278, 11736), (283, 11781), (285, 11787), (287, 11802), (290, 11832), (292, 11853), (293, 11856), (301, 11919), (304, 11946), (306, 11952), (313, 11982), (314, 11985), (316, 11991), (318, 11997), (320, 12012), (323, 12030), (328, 12111), (334, 12159), (335, 12165), (337, 12180), (339, 12192), (361, 12351), (362, 12363), (371, 12399), (372, 12405), (386, 12459), (393, 12498), (395, 12504), (396, 12507), (399, 12525), (400, 12528), (401, 12531), (405, 12555), (415, 12630), (425, 12693), (429, 12726), (432, 12771), (438, 12825), (439, 12837), (446, 12912), (447, 12933), (453, 12969), (457, 12999), (467, 13080), (469, 13089), (473, 13113), (486, 13200), (489, 13245), (490, 13248), (501, 13308), (502, 13317), (503, 13326), (521, 13434), (533, 13482), (536, 13488), (545, 13587), (546, 13590), (551, 13602), (564, 13719), (569, 13752), (577, 13803), (584, 13833), (590, 13893), (600, 13974), (605, 13995), (609, 14028), (620, 14100), (621, 14109), (639, 14223), (643, 14253), (645, 14262), (650, 14301), (651, 14304), (654, 14334), (655, 14355), (677, 14553), (683, 14616), (684, 14622), (694, 14673), (714, 14865), (723, 14952), (728, 14979), (729, 14982), (743, 15057), (747, 15081), (752, 15120), (754, 15156), (759, 15177), (767, 15264), (770, 15306), (775, 15339), (776, 15351), (790, 15495),

Gene: LitninMcQueen_18 Start: 9869, Stop: 15502, Start Num: 16

Candidate Starts for LitninMcQueen_18:

(Start: 16 @9869 has 11 MA's), (24, 9896), (Start: 26 @9914 has 1 MA's), (28, 9935), (32, 9956), (36, 10001), (Start: 37 @10016 has 1 MA's), (42, 10100), (48, 10142), (49, 10154), (59, 10217), (62, 10232), (64, 10241), (67, 10259), (68, 10265), (80, 10313), (105, 10448), (123, 10598), (129, 10628), (160, 10847), (173, 10922), (178, 10952), (198, 11156), (205, 11198), (206, 11201), (207, 11207), (209, 11228), (220, 11309), (229, 11375), (233, 11402), (234, 11414), (236, 11432), (237, 11444), (243, 11468), (246, 11480), (249, 11519), (250, 11522), (251, 11531), (254, 11561), (260, 11606), (271, 11666), (274, 11681), (277, 11711), (278, 11723), (283, 11768), (285, 11774), (287, 11789), (290, 11819), (292, 11840), (293, 11843), (301, 11906), (304, 11933), (305, 11936), (306, 11939), (307, 11945), (313, 11969), (314, 11972), (316, 11978), (318, 11984), (320, 11999), (323, 12017), (328, 12098), (334, 12146), (335, 12152), (339, 12179), (361, 12338), (362, 12350), (371, 12386), (386, 12446), (393, 12485), (395, 12491), (396, 12494), (400, 12515), (401, 12518), (415, 12617), (421, 12656), (425, 12680), (429, 12713), (432, 12758), (438, 12812), (446, 12899), (447, 12920), (453, 12956), (457, 12986), (466, 13064), (467, 13067), (469, 13076), (473, 13100), (485, 13181), (486, 13187), (489, 13232), (490, 13235), (492, 13250), (501, 13295), (502, 13304), (503, 13313), (504, 13316), (521, 13421), (533, 13469), (536, 13475), (545, 13574), (546, 13577), (551, 13589), (564, 13706), (569, 13739), (577, 13790), (584, 13820), (590, 13880), (600, 13961), (605, 13982), (609, 14015), (619, 14078), (621, 14096), (639, 14210), (643, 14240), (645, 14249), (650, 14288), (651, 14291), (654, 14321), (655, 14342), (671, 14495), (677, 14546), (683, 14609), (684, 14615), (694, 14666), (714, 14852), (723, 14939), (728, 14966), (729, 14969), (743, 15044), (747, 15068), (752, 15107), (754, 15143), (759, 15164), (767, 15251), (770, 15293), (775, 15326), (776, 15338), (786, 15416), (790, 15482),

Gene: Lutum_18 Start: 9881, Stop: 15508, Start Num: 16

Candidate Starts for Lutum_18:

(Start: 16 @9881 has 11 MA's), (24, 9908), (Start: 26 @9926 has 1 MA's), (28, 9947), (32, 9968), (36, 10013), (Start: 37 @10028 has 1 MA's), (42, 10112), (48, 10154), (49, 10166), (59, 10229), (62, 10244), (64, 10253), (67, 10271), (68, 10277), (80, 10325), (105, 10460), (123, 10610), (129, 10640), (178, 10964), (191, 11060), (198, 11168), (206, 11213), (207, 11219), (209, 11240), (212, 11264), (220, 11321), (229, 11387), (233, 11414), (234, 11426), (236, 11444), (237, 11456), (243, 11480), (246, 11492), (249, 11531), (250, 11534), (251, 11543), (254, 11573), (260, 11618), (271, 11678), (274, 11693), (277, 11723), (278, 11735), (283, 11780), (285, 11786), (287, 11801), (290, 11831), (292, 11852), (293, 11855), (301, 11918), (304, 11945), (305, 11948), (306, 11951), (307, 11957), (313, 11981), (314, 11984), (316, 11990), (318, 11996), (320, 12011), (323, 12029), (325, 12074), (334, 12158), (335, 12164), (339, 12191), (352, 12284), (353, 12293), (361, 12350), (362, 12362), (371, 12398), (372, 12404), (384, 12446), (386, 12458), (393, 12497), (395, 12503), (396, 12506), (399, 12524), (400, 12527), (401, 12530), (405, 12554), (415, 12629), (421, 12668), (425, 12692), (429, 12725), (439, 12836), (442, 12869), (447, 12932), (453, 12968), (457, 12998), (466, 13076), (467, 13079), (469, 13088), (473, 13112), (485, 13193), (486, 13199), (489, 13244), (490, 13247), (492, 13262), (501, 13307), (502, 13316), (503, 13325), (504, 13328), (521, 13433), (533, 13481), (534, 13484), (536, 13487), (545, 13586), (546, 13589), (551, 13601), (564, 13718), (569, 13751), (577, 13802), (584, 13832), (590, 13892), (600, 13973), (605, 13994), (609, 14027), (620, 14099), (621, 14108), (639, 14222), (643, 14252), (645, 14261), (650, 14300), (651, 14303), (654, 14333), (655, 14354), (677, 14552), (683, 14615), (684, 14621), (694, 14672), (714, 14858), (723, 14945), (728, 14972), (729, 14975), (743, 15050), (747, 15074), (752, 15113), (754, 15149), (759, 15170), (767, 15257), (770, 15299), (775, 15332), (776, 15344), (786, 15422), (790, 15488),

Gene: Lysidious_18 Start: 10777, Stop: 16320, Start Num: 4

Candidate Starts for Lysidious_18:

(Start: 4 @10777 has 38 MA's), (Start: 9 @10828 has 1 MA's), (10, 10837), (11, 10840), (13, 10882), (33, 10993), (35, 11014), (41, 11134), (46, 11176), (56, 11242), (59, 11260), (63, 11281), (64, 11284), (67, 11302), (73, 11326), (88, 11410), (90, 11416), (98, 11452), (100, 11467), (102, 11476), (124, 11644), (129, 11671), (143, 11788), (173, 11959), (178, 11989), (198, 12193), (206, 12238), (209, 12265), (210, 12277), (224, 12367), (229, 12412), (233, 12439), (236, 12469), (249, 12556), (250,

12559), (254, 12598), (274, 12718), (278, 12760), (283, 12805), (285, 12811), (286, 12823), (287, 12826), (293, 12880), (298, 12919), (300, 12940), (301, 12943), (303, 12961), (304, 12970), (309, 12988), (314, 13009), (316, 13015), (320, 13036), (324, 13063), (349, 13270), (369, 13351), (378, 13375), (384, 13387), (385, 13390), (397, 13405), (400, 13420), (401, 13423), (408, 13474), (419, 13555), (420, 13558), (426, 13591), (429, 13621), (431, 13645), (442, 13711), (478, 13978), (486, 14026), (489, 14071), (490, 14074), (492, 14089), (501, 14134), (502, 14143), (503, 14152), (510, 14203), (523, 14275), (528, 14293), (536, 14314), (545, 14413), (546, 14416), (553, 14449), (561, 14515), (562, 14533), (564, 14548), (569, 14581), (577, 14632), (586, 14683), (617, 14926), (618, 14929), (629, 15001), (630, 15004), (638, 15070), (639, 15073), (641, 15091), (649, 15151), (656, 15208), (657, 15226), (666, 15307), (667, 15310), (670, 15325), (686, 15484), (696, 15538), (700, 15604), (701, 15610), (710, 15670), (711, 15676), (725, 15799), (731, 15823), (735, 15841), (738, 15865), (739, 15871), (742, 15892), (749, 15931), (762, 16072), (765, 16084), (772, 16135), (774, 16153), (780, 16210), (789, 16303),

Gene: MAnor_16 Start: 9376, Stop: 14475, Start Num: 23

Candidate Starts for MAnor_16:

(Start: 23 @9376 has 36 MA's), (40, 9532), (48, 9637), (52, 9661), (59, 9712), (68, 9760), (80, 9808), (84, 9817), (87, 9859), (89, 9865), (90, 9868), (98, 9904), (102, 9928), (108, 9955), (118, 10042), (121, 10081), (122, 10087), (126, 10102), (129, 10123), (152, 10294), (164, 10357), (170, 10402), (178, 10441), (182, 10483), (198, 10645), (200, 10654), (201, 10678), (206, 10690), (209, 10717), (210, 10729), (216, 10774), (221, 10804), (223, 10816), (235, 10918), (236, 10921), (249, 11008), (252, 11035), (260, 11095), (266, 11125), (270, 11146), (274, 11170), (285, 11263), (287, 11278), (288, 11287), (289, 11299), (293, 11332), (299, 11374), (307, 11434), (308, 11437), (309, 11440), (310, 11446), (315, 11464), (320, 11488), (329, 11593), (349, 11701), (350, 11704), (352, 11740), (361, 11806), (363, 11821), (366, 11836), (370, 11851), (375, 11872), (376, 11875), (377, 11878), (386, 11914), (388, 11929), (389, 11935), (394, 11956), (399, 11980), (401, 11986), (418, 12112), (424, 12142), (429, 12181), (435, 12229), (439, 12250), (440, 12253), (441, 12259), (449, 12325), (456, 12370), (459, 12403), (460, 12424), (471, 12478), (497, 12628), (499, 12637), (511, 12724), (548, 12901), (567, 13042), (573, 13072), (595, 13210), (608, 13291), (632, 13444), (636, 13474), (672, 13696), (673, 13705), (674, 13711), (681, 13747), (699, 13864), (707, 13912), (711, 13930), (725, 14053), (731, 14077), (733, 14092), (738, 14122), (742, 14149), (744, 14155), (749, 14188), (756, 14257), (758, 14260), (760, 14296), (768, 14368), (769, 14371), (771, 14386),

Gene: MScarn_18 Start: 9601, Stop: 14400, Start Num: 74

Candidate Starts for MScarn_18:

(Start: 74 @9601 has 16 MA's), (Start: 81 @9628 has 1 MA's), (83, 9634), (106, 9757), (120, 9859), (125, 9904), (128, 9916), (130, 9934), (132, 9961), (134, 9964), (135, 9979), (141, 10030), (142, 10033), (147, 10090), (149, 10093), (157, 10135), (161, 10153), (168, 10198), (176, 10234), (180, 10267), (185, 10300), (186, 10312), (194, 10366), (195, 10405), (197, 10420), (199, 10429), (202, 10456), (211, 10507), (221, 10567), (223, 10576), (230, 10630), (240, 10693), (243, 10708), (268, 10861), (273, 10888), (283, 10981), (285, 10987), (287, 11002), (291, 11041), (301, 11119), (306, 11152), (316, 11191), (319, 11209), (320, 11212), (324, 11239), (327, 11296), (329, 11317), (345, 11428), (350, 11449), (352, 11485), (358, 11527), (359, 11539), (361, 11551), (370, 11596), (371, 11599), (375, 11617), (376, 11620), (377, 11623), (393, 11698), (401, 11731), (409, 11791), (418, 11857), (419, 11860), (420, 11863), (422, 11881), (436, 11980), (439, 11995), (440, 11998), (459, 12148), (460, 12169), (468, 12211), (474, 12238), (475, 12244), (499, 12388), (511, 12475), (519, 12517), (529, 12553), (543, 12628), (552, 12679), (557, 12718), (559, 12742), (575, 12847), (585, 12904), (606, 13042), (613, 13117), (636, 13261), (639, 13282), (662, 13459), (663, 13465), (699, 13789), (701, 13795), (711, 13855), (716, 13906), (725, 13978), (733, 14017), (738, 14047), (749, 14113), (753, 14161), (760, 14221), (771, 14311), (779, 14371),

Gene: MaVan_18 Start: 10619, Stop: 15748, Start Num: 23

Candidate Starts for MaVan_18:

(18, 10598), (Start: 23 @10619 has 36 MA's), (27, 10646), (40, 10775), (46, 10871), (53, 10922), (65, 10979), (70, 11012), (71, 11015), (87, 11102), (91, 11114), (100, 11162), (101, 11165), (102, 11171), (109, 11225), (111, 11231), (116, 11279), (126, 11345), (129, 11366), (187, 11759), (188, 11762), (195, 11864), (206, 11930), (207, 11936), (209, 11957), (236, 12161), (239, 12179), (243, 12197), (246, 12209), (249, 12248), (251, 12260), (256, 12296), (263, 12353), (268, 12377), (269, 12383), (285, 12503), (287, 12518), (291, 12557), (300, 12632), (305, 12665), (309, 12680), (310, 12686), (311, 12692), (320, 12728), (330, 12836), (339, 12908), (349, 12962), (351, 12968), (370, 13112), (376, 13136), (389, 13196), (392, 13208), (393, 13214), (399, 13241), (400, 13244), (401, 13247), (414, 13340), (415, 13346), (422, 13397), (431, 13466), (437, 13499), (440, 13514), (441, 13520), (448, 13577), (450, 13589), (455, 13628), (456, 13631), (458, 13652), (459, 13664), (460, 13685), (461, 13688), (468, 13727), (471, 13739), (474, 13754), (497, 13895), (511, 13991), (522, 14057), (532, 14078), (535, 14084), (567, 14321), (573, 14351), (578, 14390), (599, 14525), (606, 14555), (608, 14576), (632, 14735), (636, 14768), (673, 14981), (679, 14999), (681, 15005), (699, 15134), (711, 15200), (716, 15251), (725, 15323), (733, 15362), (738, 15392), (744, 15425), (749, 15458), (758, 15530), (763, 15602), (770, 15656), (772, 15662), (779, 15719),

Gene: MagicMan_17 Start: 10932, Stop: 16046, Start Num: 20

Candidate Starts for MagicMan_17:

(Start: 20 @10932 has 13 MA's), (Start: 23 @10941 has 36 MA's), (49, 11214), (51, 11223), (54, 11253), (57, 11262), (67, 11319), (84, 11382), (93, 11454), (99, 11475), (102, 11493), (121, 11646), (129, 11688), (136, 11742), (140, 11775), (170, 11967), (171, 11970), (178, 12006), (188, 12084), (193, 12123), (198, 12207), (201, 12240), (205, 12249), (207, 12258), (210, 12291), (212, 12303), (215, 12327), (222, 12372), (224, 12381), (228, 12417), (229, 12426), (233, 12453), (234, 12465), (236, 12483), (243, 12519), (258, 12642), (265, 12684), (283, 12819), (284, 12822), (285, 12825), (287, 12840), (293, 12894), (298, 12933), (309, 13002), (311, 13014), (316, 13029), (320, 13050), (322, 13065), (324, 13077), (325, 13113), (328, 13149), (353, 13311), (382, 13368), (390, 13380), (391, 13383), (401, 13416), (414, 13509), (415, 13515), (416, 13521), (418, 13542), (419, 13545), (420, 13548), (429, 13611), (433, 13647), (436, 13662), (441, 13686), (443, 13701), (444, 13704), (445, 13710), (452, 13764), (463, 13863), (470, 13905), (483, 13983), (486, 14007), (491, 14052), (512, 14178), (515, 14187), (518, 14205), (519, 14208), (530, 14247), (531, 14250), (534, 14259), (556, 14418), (572, 14538), (587, 14616), (595, 14664), (597, 14676), (607, 14736), (625, 14853), (630, 14880), (633, 14898), (642, 14976), (644, 14982), (646, 14991), (648, 15018), (658, 15111), (664, 15150), (668, 15192), (687, 15345), (694, 15378), (695, 15381), (698, 15438), (702, 15447), (704, 15459), (708, 15480), (711, 15501), (740, 15693), (747, 15732), (758, 15801), (761, 15855), (782, 16008),

Gene: Malachai_18 Start: 10785, Stop: 16274, Start Num: 4

Candidate Starts for Malachai_18:

(Start: 4 @10785 has 38 MA's), (8, 10824), (Start: 9 @10836 has 1 MA's), (10, 10845), (11, 10848), (13, 10890), (33, 11001), (35, 11022), (41, 11142), (46, 11184), (56, 11250), (59, 11268), (62, 11283), (63, 11289), (64, 11292), (67, 11310), (73, 11334), (88, 11418), (98, 11460), (100, 11475), (102, 11484), (124, 11652), (129, 11679), (139, 11754), (143, 11796), (151, 11844), (173, 11967), (178, 11997), (198, 12201), (206, 12246), (209, 12273), (210, 12285), (224, 12375), (229, 12420), (233, 12447), (236, 12477), (249, 12564), (254, 12606), (274, 12726), (278, 12768), (283, 12813), (285, 12819), (286, 12831), (287, 12834), (293, 12888), (298, 12927), (300, 12948), (301, 12951), (303, 12969), (309, 12996), (316, 13023), (320, 13044), (324, 13071), (328, 13143), (365, 13344), (369, 13359), (378, 13383), (385, 13398), (400, 13428), (401, 13431), (408, 13482), (419, 13563), (420, 13566), (426, 13599), (429, 13629), (431, 13653), (442, 13719), (478, 13986), (486, 14034), (489, 14079), (490, 14082), (492, 14097), (501, 14142), (502, 14151), (503, 14160), (510, 14211), (523, 14283), (528, 14301), (536, 14322), (545, 14421), (546, 14424), (553, 14457), (561, 14523), (562, 14541), (564, 14556), (569, 14589), (577, 14640), (586, 14691), (617, 14934), (618, 14937), (630, 15012), (638, 15078), (639, 15081), (641, 15099), (649, 15159), (666, 15315), (667, 15318), (670, 15333), (696, 15552), (703, 15609), (706, 15624), (712, 15672), (717, 15717), (740, 15837), (741,

15846), (748, 15885), (757, 15957), (762, 16026), (765, 16038), (772, 16089), (774, 16107), (780, 16164), (789, 16257),

Gene: Malisha_19 Start: 11668, Stop: 17280, Start Num: 17

Candidate Starts for Malisha_19:

(Start: 17 @11668 has 5 MA's), (21, 11686), (24, 11695), (Start: 26 @11713 has 1 MA's), (28, 11734), (30, 11746), (36, 11800), (Start: 37 @11815 has 1 MA's), (54, 11992), (59, 12016), (64, 12040), (67, 12058), (77, 12103), (89, 12169), (90, 12172), (102, 12232), (123, 12397), (129, 12427), (145, 12583), (173, 12721), (191, 12847), (198, 12955), (201, 12988), (206, 13000), (209, 13027), (229, 13174), (233, 13201), (236, 13231), (243, 13267), (249, 13318), (250, 13321), (251, 13330), (256, 13366), (265, 13432), (274, 13480), (276, 13495), (277, 13510), (282, 13564), (283, 13567), (285, 13573), (286, 13585), (287, 13588), (292, 13639), (293, 13642), (298, 13681), (316, 13777), (320, 13798), (342, 14002), (349, 14032), (358, 14113), (361, 14137), (362, 14149), (371, 14185), (386, 14245), (393, 14284), (396, 14293), (400, 14314), (401, 14317), (415, 14416), (421, 14455), (425, 14479), (429, 14512), (432, 14557), (438, 14611), (439, 14623), (446, 14698), (447, 14719), (453, 14755), (457, 14785), (467, 14866), (469, 14875), (473, 14899), (485, 14980), (486, 14986), (489, 15031), (490, 15034), (501, 15094), (502, 15103), (503, 15112), (521, 15220), (533, 15268), (536, 15274), (545, 15373), (546, 15376), (551, 15388), (564, 15505), (569, 15538), (576, 15586), (577, 15589), (584, 15619), (590, 15679), (600, 15760), (605, 15781), (606, 15784), (619, 15877), (620, 15886), (636, 15988), (639, 16009), (643, 16039), (645, 16048), (650, 16087), (651, 16090), (652, 16093), (654, 16120), (659, 16174), (671, 16291), (680, 16375), (682, 16387), (683, 16399), (684, 16405), (688, 16432), (694, 16456), (714, 16633), (723, 16720), (727, 16738), (728, 16747), (743, 16825), (745, 16840), (747, 16849), (754, 16924), (755, 16933), (759, 16945), (767, 17032), (770, 17074), (775, 17107), (776, 17119), (786, 17194), (790, 17260),

Gene: Malvina_18 Start: 10516, Stop: 15633, Start Num: 23

Candidate Starts for Malvina_18:

(18, 10495), (Start: 23 @10516 has 36 MA's), (27, 10543), (40, 10672), (44, 10756), (50, 10795), (53, 10819), (65, 10876), (69, 10903), (70, 10909), (87, 10999), (100, 11059), (101, 11062), (111, 11128), (116, 11176), (126, 11242), (129, 11263), (179, 11602), (187, 11656), (188, 11659), (195, 11761), (203, 11818), (205, 11824), (206, 11827), (207, 11833), (209, 11854), (216, 11911), (224, 11956), (236, 12058), (239, 12076), (249, 12145), (256, 12193), (263, 12250), (268, 12274), (269, 12280), (285, 12400), (287, 12415), (291, 12454), (300, 12529), (303, 12550), (309, 12577), (310, 12583), (319, 12622), (320, 12625), (330, 12733), (339, 12805), (348, 12856), (349, 12859), (361, 12964), (370, 13009), (376, 13033), (394, 13114), (400, 13141), (401, 13144), (408, 13195), (415, 13243), (416, 13249), (422, 13294), (440, 13411), (441, 13417), (448, 13474), (456, 13528), (458, 13549), (459, 13561), (460, 13582), (461, 13585), (474, 13651), (475, 13657), (497, 13792), (499, 13801), (507, 13858), (511, 13885), (535, 13978), (567, 14206), (570, 14227), (573, 14236), (599, 14410), (606, 14440), (608, 14461), (636, 14653), (661, 14743), (681, 14890), (685, 14911), (699, 15019), (711, 15085), (716, 15136), (725, 15208), (733, 15247), (734, 15250), (738, 15277), (744, 15310), (749, 15343), (751, 15364), (753, 15391), (763, 15487), (770, 15541), (772, 15547),

Gene: Margaret_19 Start: 10311, Stop: 14516, Start Num: 72

Candidate Starts for Margaret_19:

(Start: 72 @10311 has 7 MA's), (Start: 78 @10338 has 1 MA's), (121, 10626), (126, 10647), (127, 10653), (131, 10686), (133, 10704), (137, 10728), (144, 10818), (146, 10827), (149, 10836), (156, 10869), (161, 10896), (163, 10905), (166, 10929), (192, 11082), (196, 11145), (198, 11160), (204, 11196), (208, 11226), (211, 11247), (218, 11289), (230, 11370), (241, 11445), (242, 11454), (247, 11475), (268, 11622), (287, 11763), (289, 11784), (293, 11817), (294, 11835), (298, 11856), (300, 11877), (303, 11898), (315, 11949), (316, 11952), (317, 11955), (320, 11973), (340, 12054), (347, 12084), (352, 12135), (381, 12189), (393, 12216), (401, 12249), (409, 12309), (419, 12378), (420, 12381), (433, 12483), (434, 12489), (439, 12513), (443, 12537), (444, 12540), (456, 12633), (459, 12666), (460, 12687), (462, 12696), (464, 12705), (465, 12711), (488, 12864), (506, 12933), (508,

12939), (514, 12975), (548, 13104), (567, 13245), (571, 13269), (578, 13314), (603, 13467), (604, 13470), (632, 13659), (636, 13689), (691, 13866), (703, 13938), (707, 13962), (710, 13974), (713, 13998), (715, 14010), (724, 14094), (725, 14100), (735, 14142), (738, 14163), (744, 14196), (749, 14229), (751, 14250), (753, 14277), (758, 14301), (760, 14337), (766, 14385), (779, 14487),

Gene: Mayweather_17 Start: 10006, Stop: 15090, Start Num: 23

Candidate Starts for Mayweather_17:

(Start: 23 @10006 has 36 MA's), (40, 10162), (52, 10291), (55, 10321), (68, 10390), (71, 10402), (75, 10417), (80, 10438), (84, 10447), (87, 10489), (90, 10498), (98, 10534), (102, 10558), (111, 10618), (118, 10672), (121, 10711), (122, 10717), (126, 10732), (129, 10753), (152, 10924), (164, 10987), (170, 11032), (182, 11113), (198, 11272), (201, 11305), (206, 11317), (209, 11344), (216, 11401), (221, 11431), (223, 11443), (235, 11545), (236, 11548), (249, 11635), (256, 11683), (274, 11797), (285, 11890), (287, 11905), (289, 11926), (293, 11959), (299, 12001), (303, 12040), (308, 12064), (309, 12067), (310, 12073), (315, 12091), (320, 12115), (329, 12220), (338, 12268), (349, 12328), (350, 12331), (352, 12367), (361, 12433), (363, 12448), (370, 12478), (375, 12499), (376, 12502), (386, 12541), (389, 12562), (394, 12583), (399, 12607), (401, 12613), (418, 12739), (424, 12769), (429, 12808), (435, 12856), (439, 12877), (440, 12880), (449, 12952), (456, 12997), (459, 13030), (460, 13051), (471, 13105), (482, 13180), (499, 13264), (511, 13351), (567, 13669), (573, 13699), (595, 13837), (604, 13888), (608, 13918), (632, 14071), (636, 14101), (672, 14311), (673, 14320), (674, 14326), (681, 14362), (699, 14479), (701, 14485), (707, 14527), (711, 14545), (725, 14668), (731, 14692), (733, 14707), (738, 14737), (742, 14764), (744, 14770), (749, 14803), (756, 14872), (758, 14875), (760, 14911), (768, 14983), (771, 15001),

Gene: McDazzle_15 Start: 10003, Stop: 14937, Start Num: 40

Candidate Starts for McDazzle_15:

(Start: 23 @9847 has 36 MA's), (40, 10003), (48, 10108), (52, 10132), (59, 10183), (68, 10231), (80, 10279), (84, 10288), (87, 10330), (89, 10336), (90, 10339), (98, 10375), (102, 10399), (108, 10426), (118, 10513), (121, 10552), (122, 10558), (126, 10573), (129, 10594), (136, 10648), (152, 10765), (164, 10828), (170, 10873), (178, 10912), (182, 10954), (198, 11116), (200, 11125), (201, 11149), (206, 11161), (209, 11188), (210, 11200), (216, 11245), (221, 11275), (223, 11287), (235, 11389), (236, 11392), (249, 11479), (252, 11506), (260, 11566), (266, 11596), (270, 11617), (274, 11641), (280, 11692), (285, 11734), (287, 11749), (288, 11758), (289, 11770), (293, 11803), (299, 11845), (307, 11905), (308, 11908), (309, 11911), (315, 11935), (320, 11959), (329, 12064), (338, 12112), (349, 12172), (350, 12175), (352, 12211), (361, 12277), (363, 12292), (366, 12307), (370, 12322), (375, 12343), (376, 12346), (386, 12385), (388, 12400), (389, 12406), (394, 12427), (399, 12451), (401, 12457), (418, 12583), (424, 12613), (429, 12652), (435, 12700), (439, 12721), (440, 12724), (441, 12730), (449, 12796), (456, 12841), (459, 12874), (460, 12895), (471, 12949), (497, 13099), (499, 13108), (511, 13195), (548, 13372), (567, 13513), (573, 13543), (595, 13681), (608, 13762), (632, 13915), (636, 13945), (672, 14167), (673, 14176), (674, 14182), (681, 14209), (699, 14326), (701, 14332), (707, 14374), (711, 14392), (725, 14515), (731, 14539), (733, 14554), (738, 14584), (742, 14611), (744, 14617), (749, 14650), (756, 14719), (758, 14722), (760, 14758), (768, 14830), (771, 14848),

Gene: Melba_17 Start: 10274, Stop: 15796, Start Num: 4

Candidate Starts for Melba_17:

(Start: 4 @10274 has 38 MA's), (Start: 6 @10289 has 1 MA's), (Start: 7 @10295 has 1 MA's), (Start: 9 @10325 has 1 MA's), (10, 10334), (11, 10337), (13, 10379), (33, 10490), (35, 10511), (41, 10631), (46, 10673), (56, 10739), (59, 10757), (63, 10778), (64, 10781), (67, 10799), (73, 10823), (88, 10907), (89, 10910), (98, 10949), (100, 10964), (102, 10973), (124, 11141), (129, 11168), (143, 11285), (173, 11456), (178, 11486), (198, 11690), (206, 11735), (209, 11762), (210, 11774), (224, 11864), (229, 11909), (233, 11936), (236, 11966), (249, 12053), (250, 12056), (254, 12095), (267, 12179), (274, 12215), (278, 12257), (283, 12302), (285, 12308), (286, 12320), (287, 12323), (293, 12377), (298, 12416), (300, 12437), (301, 12440), (303, 12458), (304, 12467), (309, 12485), (314, 12506), (316,

12512), (320, 12533), (324, 12560), (329, 12638), (369, 12827), (378, 12851), (384, 12863), (385, 12866), (397, 12881), (400, 12896), (401, 12899), (408, 12950), (419, 13031), (420, 13034), (426, 13067), (429, 13097), (431, 13121), (478, 13454), (486, 13502), (489, 13547), (490, 13550), (492, 13565), (501, 13610), (502, 13619), (503, 13628), (510, 13679), (523, 13751), (528, 13769), (536, 13790), (545, 13889), (546, 13892), (553, 13925), (561, 13991), (562, 14009), (564, 14024), (569, 14057), (577, 14108), (586, 14159), (591, 14207), (617, 14402), (618, 14405), (629, 14477), (630, 14480), (638, 14546), (639, 14549), (641, 14567), (649, 14627), (656, 14684), (657, 14702), (666, 14783), (667, 14786), (670, 14801), (696, 15014), (700, 15080), (709, 15134), (710, 15146), (711, 15152), (725, 15275), (731, 15299), (735, 15317), (738, 15341), (739, 15347), (742, 15368), (749, 15407), (762, 15548), (765, 15560), (772, 15611), (774, 15629), (789, 15779),

Gene: Mellie_16 Start: 10014, Stop: 15557, Start Num: 4

Candidate Starts for Mellie_16:

(Start: 4 @10014 has 38 MA's), (Start: 6 @10029 has 1 MA's), (Start: 7 @10035 has 1 MA's), (Start: 9 @10065 has 1 MA's), (10, 10074), (11, 10077), (13, 10119), (33, 10230), (35, 10251), (56, 10479), (59, 10497), (62, 10512), (63, 10518), (64, 10521), (67, 10539), (73, 10563), (88, 10647), (90, 10653), (98, 10689), (100, 10704), (102, 10713), (124, 10881), (129, 10908), (143, 11025), (173, 11196), (178, 11226), (198, 11430), (206, 11475), (209, 11502), (210, 11514), (224, 11604), (233, 11676), (236, 11706), (249, 11793), (250, 11796), (254, 11835), (274, 11955), (278, 11997), (283, 12042), (285, 12048), (286, 12060), (287, 12063), (293, 12117), (298, 12156), (300, 12177), (301, 12180), (303, 12198), (314, 12246), (316, 12252), (320, 12273), (324, 12300), (328, 12372), (349, 12507), (369, 12588), (378, 12612), (385, 12627), (400, 12657), (401, 12660), (408, 12711), (419, 12792), (420, 12795), (426, 12828), (429, 12858), (431, 12882), (442, 12948), (478, 13215), (481, 13233), (486, 13263), (489, 13308), (490, 13311), (492, 13326), (493, 13335), (501, 13371), (502, 13380), (503, 13389), (510, 13440), (523, 13512), (528, 13530), (536, 13551), (545, 13650), (546, 13653), (553, 13686), (561, 13752), (562, 13770), (564, 13785), (569, 13818), (577, 13869), (586, 13920), (617, 14163), (618, 14166), (629, 14238), (630, 14241), (638, 14307), (639, 14310), (641, 14328), (649, 14388), (656, 14445), (657, 14463), (666, 14544), (667, 14547), (670, 14562), (696, 14775), (700, 14841), (701, 14847), (710, 14907), (711, 14913), (725, 15036), (731, 15060), (735, 15078), (738, 15102), (739, 15108), (742, 15129), (749, 15168), (762, 15309), (765, 15321), (772, 15372), (774, 15390), (789, 15540),

Gene: MintFen_17 Start: 10274, Stop: 15796, Start Num: 4

Candidate Starts for MintFen_17:

(Start: 4 @10274 has 38 MA's), (Start: 6 @10289 has 1 MA's), (Start: 7 @10295 has 1 MA's), (Start: 9 @10325 has 1 MA's), (10, 10334), (11, 10337), (13, 10379), (33, 10490), (35, 10511), (41, 10631), (46, 10673), (56, 10739), (59, 10757), (63, 10778), (64, 10781), (67, 10799), (73, 10823), (88, 10907), (89, 10910), (98, 10949), (100, 10964), (102, 10973), (124, 11141), (129, 11168), (143, 11285), (173, 11456), (178, 11486), (198, 11690), (206, 11735), (209, 11762), (210, 11774), (224, 11864), (229, 11909), (233, 11936), (236, 11966), (249, 12053), (250, 12056), (254, 12095), (267, 12179), (274, 12215), (278, 12257), (283, 12302), (285, 12308), (286, 12320), (287, 12323), (293, 12377), (298, 12416), (300, 12437), (301, 12440), (303, 12458), (304, 12467), (309, 12485), (314, 12506), (316, 12512), (320, 12533), (324, 12560), (329, 12638), (369, 12827), (378, 12851), (384, 12863), (385, 12866), (397, 12881), (400, 12896), (401, 12899), (408, 12950), (419, 13031), (420, 13034), (426, 13067), (429, 13097), (431, 13121), (478, 13454), (486, 13502), (489, 13547), (490, 13550), (492, 13565), (501, 13610), (502, 13619), (503, 13628), (510, 13679), (523, 13751), (528, 13769), (536, 13790), (545, 13889), (546, 13892), (553, 13925), (561, 13991), (562, 14009), (564, 14024), (569, 14057), (577, 14108), (586, 14159), (591, 14207), (617, 14402), (618, 14405), (629, 14477), (630, 14480), (638, 14546), (639, 14549), (641, 14567), (649, 14627), (656, 14684), (657, 14702), (666, 14783), (667, 14786), (670, 14801), (696, 15014), (700, 15080), (709, 15134), (710, 15146), (711, 15152), (725, 15275), (731, 15299), (735, 15317), (738, 15341), (739, 15347), (742, 15368), (749, 15407), (762, 15548), (765, 15560), (772, 15611), (774, 15629), (789, 15779),

Gene: MissRona_19 Start: 10619, Stop: 16108, Start Num: 4

Candidate Starts for MissRona_19:

(Start: 4 @10619 has 38 MA's), (Start: 6 @10634 has 1 MA's), (Start: 7 @10640 has 1 MA's), (Start: 9 @10670 has 1 MA's), (10, 10679), (11, 10682), (13, 10724), (33, 10835), (35, 10856), (41, 10976), (46, 11018), (56, 11084), (59, 11102), (63, 11123), (64, 11126), (67, 11144), (73, 11168), (88, 11252), (98, 11294), (100, 11309), (102, 11318), (124, 11486), (129, 11513), (143, 11630), (173, 11801), (178, 11831), (198, 12035), (206, 12080), (209, 12107), (210, 12119), (212, 12131), (224, 12209), (229, 12254), (233, 12281), (236, 12311), (249, 12398), (250, 12401), (254, 12440), (263, 12503), (265, 12512), (274, 12560), (278, 12602), (283, 12647), (285, 12653), (287, 12668), (293, 12722), (298, 12761), (300, 12782), (301, 12785), (303, 12803), (309, 12830), (314, 12851), (316, 12857), (320, 12878), (323, 12896), (324, 12905), (365, 13178), (385, 13232), (400, 13262), (401, 13265), (408, 13316), (419, 13397), (420, 13400), (426, 13433), (429, 13463), (431, 13487), (442, 13553), (478, 13820), (486, 13868), (487, 13901), (489, 13913), (490, 13916), (501, 13976), (502, 13985), (503, 13994), (510, 14045), (523, 14117), (528, 14135), (536, 14156), (545, 14255), (546, 14258), (553, 14291), (561, 14357), (562, 14375), (564, 14390), (569, 14423), (577, 14474), (586, 14525), (594, 14594), (617, 14768), (618, 14771), (629, 14843), (630, 14846), (638, 14912), (639, 14915), (641, 14933), (649, 14993), (656, 15050), (657, 15068), (666, 15149), (667, 15152), (670, 15167), (686, 15338), (696, 15392), (706, 15464), (707, 15473), (712, 15509), (720, 15569), (722, 15587), (726, 15605), (737, 15650), (741, 15683), (757, 15794), (762, 15863), (772, 15926), (774, 15944), (789, 16094),

Gene: MunkgeeRoachy_16 Start: 9677, Stop: 14815, Start Num: 23

Candidate Starts for MunkgeeRoachy_16:

(Start: 17 @9653 has 5 MA's), (Start: 23 @9677 has 36 MA's), (27, 9704), (40, 9833), (43, 9908), (68, 10061), (69, 10064), (87, 10160), (90, 10169), (96, 10199), (98, 10205), (100, 10220), (101, 10223), (105, 10244), (114, 10316), (116, 10337), (126, 10403), (129, 10424), (143, 10541), (170, 10703), (178, 10742), (187, 10817), (201, 10976), (206, 10988), (209, 11015), (214, 11060), (216, 11072), (231, 11180), (234, 11201), (237, 11231), (243, 11255), (246, 11267), (249, 11306), (253, 11339), (269, 11441), (270, 11444), (273, 11462), (274, 11468), (285, 11561), (287, 11576), (291, 11615), (298, 11669), (303, 11711), (312, 11753), (319, 11783), (320, 11786), (330, 11894), (331, 11897), (336, 11948), (350, 12023), (359, 12113), (361, 12125), (370, 12170), (375, 12191), (376, 12194), (377, 12197), (393, 12272), (401, 12305), (404, 12326), (408, 12356), (415, 12404), (416, 12410), (420, 12437), (440, 12572), (456, 12689), (459, 12722), (460, 12743), (461, 12746), (474, 12812), (475, 12818), (477, 12833), (497, 12953), (499, 12962), (511, 13046), (567, 13367), (602, 13586), (608, 13622), (639, 13835), (673, 14027), (681, 14075), (685, 14096), (699, 14204), (711, 14270), (713, 14288), (725, 14393), (732, 14423), (733, 14432), (738, 14462), (749, 14528), (753, 14576), (760, 14636), (770, 14723), (779, 14786),

Gene: Murp_17 Start: 10264, Stop: 15864, Start Num: 4

Candidate Starts for Murp_17:

(Start: 4 @10264 has 38 MA's), (Start: 6 @10279 has 1 MA's), (Start: 7 @10285 has 1 MA's), (Start: 9 @10315 has 1 MA's), (10, 10324), (11, 10327), (13, 10369), (33, 10480), (35, 10501), (41, 10621), (47, 10669), (56, 10729), (59, 10747), (63, 10768), (64, 10771), (67, 10789), (88, 10897), (90, 10903), (98, 10939), (100, 10954), (102, 10963), (124, 11131), (129, 11158), (143, 11275), (173, 11446), (178, 11476), (191, 11572), (198, 11680), (206, 11725), (209, 11752), (210, 11764), (224, 11854), (229, 11899), (233, 11926), (236, 11956), (249, 12043), (254, 12085), (256, 12091), (274, 12205), (278, 12247), (283, 12292), (285, 12298), (287, 12313), (293, 12367), (298, 12406), (300, 12427), (301, 12430), (303, 12448), (304, 12457), (309, 12475), (314, 12496), (316, 12502), (320, 12523), (324, 12550), (326, 12598), (329, 12628), (365, 12802), (378, 12841), (385, 12856), (400, 12886), (401, 12889), (408, 12940), (419, 13021), (420, 13024), (426, 13057), (429, 13087), (431, 13111), (441, 13165), (442, 13177), (466, 13366), (478, 13444), (485, 13486), (489, 13537), (490, 13540), (492, 13555), (494, 13567), (501, 13600), (502, 13609), (516, 13723), (524, 13777), (527, 13795), (540, 13879), (541, 13885), (544, 13921), (588, 14245), (593, 14293), (594, 14305), (601, 14368), (610,

14437), (614, 14467), (615, 14470), (617, 14479), (618, 14482), (622, 14515), (629, 14554), (630, 14557), (638, 14623), (639, 14626), (641, 14644), (649, 14704), (656, 14761), (657, 14779), (666, 14860), (670, 14878), (696, 15079), (700, 15145), (710, 15211), (711, 15217), (725, 15343), (731, 15367), (735, 15385), (738, 15409), (739, 15415), (742, 15436), (749, 15475), (762, 15616), (772, 15679), (774, 15697), (780, 15757), (789, 15850),

Gene: NaLuna_17 Start: 10605, Stop: 15728, Start Num: 20

Candidate Starts for NaLuna_17:

(Start: 20 @10605 has 13 MA's), (Start: 23 @10614 has 36 MA's), (49, 10887), (51, 10896), (54, 10926), (84, 11055), (102, 11166), (110, 11223), (129, 11361), (136, 11415), (140, 11448), (173, 11649), (178, 11679), (188, 11757), (191, 11775), (193, 11796), (198, 11880), (201, 11913), (205, 11922), (207, 11931), (210, 11964), (212, 11976), (215, 12000), (222, 12045), (224, 12054), (228, 12090), (229, 12099), (233, 12126), (234, 12138), (236, 12156), (243, 12192), (258, 12315), (265, 12357), (283, 12492), (284, 12495), (285, 12498), (287, 12513), (293, 12567), (298, 12606), (311, 12687), (316, 12702), (320, 12723), (322, 12738), (324, 12750), (325, 12786), (328, 12822), (353, 12984), (382, 13041), (390, 13053), (391, 13056), (401, 13089), (403, 13107), (414, 13182), (415, 13188), (416, 13194), (418, 13215), (419, 13218), (420, 13221), (429, 13284), (433, 13320), (436, 13335), (441, 13359), (443, 13374), (444, 13377), (452, 13437), (463, 13536), (470, 13578), (483, 13656), (491, 13725), (496, 13743), (512, 13851), (518, 13878), (519, 13881), (530, 13920), (531, 13923), (534, 13932), (539, 13980), (553, 14067), (556, 14091), (563, 14151), (572, 14211), (587, 14289), (595, 14337), (597, 14349), (607, 14409), (610, 14451), (625, 14532), (630, 14559), (633, 14577), (636, 14607), (642, 14655), (644, 14661), (646, 14670), (653, 14718), (658, 14790), (664, 14829), (668, 14871), (694, 15057), (695, 15060), (698, 15117), (702, 15126), (704, 15138), (708, 15159), (740, 15372), (747, 15411), (758, 15480), (761, 15534), (773, 15606), (782, 15687), (784, 15711),

Gene: Nibbles_18 Start: 10619, Stop: 15748, Start Num: 23

Candidate Starts for Nibbles_18:

(18, 10598), (Start: 23 @10619 has 36 MA's), (27, 10646), (40, 10775), (46, 10871), (53, 10922), (65, 10979), (70, 11012), (71, 11015), (87, 11102), (91, 11114), (100, 11162), (101, 11165), (102, 11171), (109, 11225), (111, 11231), (116, 11279), (126, 11345), (129, 11366), (187, 11759), (188, 11762), (195, 11864), (206, 11930), (207, 11936), (209, 11957), (236, 12161), (239, 12179), (241, 12185), (243, 12197), (246, 12209), (249, 12248), (251, 12260), (256, 12296), (263, 12353), (268, 12377), (285, 12503), (287, 12518), (291, 12557), (300, 12632), (305, 12665), (309, 12680), (310, 12686), (311, 12692), (320, 12728), (330, 12836), (339, 12908), (349, 12962), (370, 13112), (376, 13136), (389, 13196), (392, 13208), (393, 13214), (399, 13241), (400, 13244), (401, 13247), (414, 13340), (415, 13346), (422, 13397), (431, 13466), (437, 13499), (440, 13514), (441, 13520), (448, 13577), (450, 13589), (455, 13628), (456, 13631), (458, 13652), (459, 13664), (460, 13685), (461, 13688), (468, 13727), (471, 13739), (474, 13754), (497, 13895), (511, 13991), (522, 14057), (532, 14078), (535, 14084), (567, 14321), (573, 14351), (578, 14390), (599, 14525), (606, 14555), (608, 14576), (632, 14735), (636, 14768), (673, 14981), (679, 14999), (681, 15005), (699, 15134), (711, 15200), (716, 15251), (725, 15323), (733, 15362), (738, 15392), (744, 15425), (749, 15458), (758, 15530), (763, 15602), (770, 15656), (772, 15662), (779, 15719),

Gene: Nina_17 Start: 10662, Stop: 15809, Start Num: 23

Candidate Starts for Nina_17:

(Start: 17 @10638 has 5 MA's), (Start: 23 @10662 has 36 MA's), (27, 10689), (40, 10818), (44, 10911), (45, 10914), (58, 11004), (63, 11028), (73, 11073), (75, 11082), (87, 11154), (89, 11160), (90, 11163), (95, 11190), (97, 11196), (100, 11214), (101, 11217), (105, 11238), (114, 11310), (116, 11331), (126, 11397), (129, 11418), (143, 11535), (170, 11697), (178, 11736), (187, 11811), (201, 11970), (206, 11982), (209, 12009), (214, 12054), (216, 12066), (229, 12156), (231, 12174), (234, 12195), (237, 12225), (243, 12249), (246, 12261), (249, 12300), (253, 12333), (269, 12435), (270, 12438), (274, 12462), (285, 12555), (287, 12570), (291, 12609), (298, 12663), (303, 12705), (305, 12717), (312,

12747), (319, 12777), (320, 12780), (330, 12888), (331, 12891), (336, 12942), (337, 12948), (350, 13017), (359, 13107), (361, 13119), (370, 13164), (375, 13185), (376, 13188), (377, 13191), (393, 13266), (401, 13299), (404, 13320), (408, 13350), (415, 13398), (416, 13404), (420, 13431), (440, 13566), (456, 13683), (459, 13716), (460, 13737), (474, 13806), (475, 13812), (477, 13827), (497, 13947), (499, 13956), (511, 14040), (567, 14361), (570, 14382), (602, 14580), (608, 14616), (639, 14829), (673, 15021), (681, 15069), (685, 15090), (699, 15198), (711, 15264), (713, 15282), (725, 15387), (732, 15417), (733, 15426), (738, 15456), (749, 15522), (753, 15570), (760, 15630), (770, 15717), (779, 15780),

Gene: Nodigi_18 Start: 10594, Stop: 14802, Start Num: 72

Candidate Starts for Nodigi_18:

(Start: 72 @10594 has 7 MA's), (Start: 78 @10621 has 1 MA's), (126, 10930), (133, 10987), (137, 11011), (141, 11056), (144, 11101), (149, 11119), (153, 11134), (156, 11152), (157, 11161), (167, 11215), (177, 11272), (189, 11353), (194, 11401), (196, 11440), (198, 11455), (200, 11464), (204, 11491), (208, 11521), (211, 11542), (230, 11665), (238, 11731), (248, 11794), (261, 11881), (274, 11950), (287, 12058), (289, 12079), (293, 12112), (294, 12130), (297, 12148), (300, 12172), (304, 12202), (316, 12247), (317, 12250), (320, 12268), (347, 12379), (349, 12391), (350, 12394), (352, 12430), (369, 12472), (381, 12484), (393, 12511), (401, 12544), (412, 12619), (419, 12673), (420, 12676), (422, 12694), (429, 12739), (434, 12784), (443, 12832), (444, 12835), (459, 12961), (462, 12991), (464, 13000), (465, 13006), (488, 13159), (500, 13204), (506, 13228), (508, 13234), (514, 13270), (526, 13327), (542, 13378), (549, 13423), (567, 13561), (572, 13591), (603, 13783), (632, 13960), (691, 14152), (703, 14224), (710, 14260), (713, 14284), (715, 14296), (718, 14338), (725, 14386), (738, 14449), (742, 14476), (744, 14482), (749, 14515), (751, 14536), (753, 14563), (758, 14587), (760, 14623), (762, 14650), (764, 14659), (766, 14671), (779, 14773),

Gene: Obliviate_16 Start: 10043, Stop: 15586, Start Num: 4

Candidate Starts for Obliviate_16:

(Start: 4 @10043 has 38 MA's), (Start: 6 @10058 has 1 MA's), (Start: 7 @10064 has 1 MA's), (Start: 9 @10094 has 1 MA's), (10, 10103), (11, 10106), (13, 10148), (33, 10259), (35, 10280), (56, 10508), (59, 10526), (62, 10541), (63, 10547), (64, 10550), (67, 10568), (73, 10592), (88, 10676), (90, 10682), (98, 10718), (100, 10733), (102, 10742), (124, 10910), (129, 10937), (143, 11054), (152, 11108), (173, 11225), (178, 11255), (198, 11459), (206, 11504), (209, 11531), (210, 11543), (224, 11633), (229, 11678), (233, 11705), (236, 11735), (249, 11822), (250, 11825), (254, 11864), (274, 11984), (278, 12026), (283, 12071), (285, 12077), (286, 12089), (287, 12092), (293, 12146), (298, 12185), (300, 12206), (301, 12209), (303, 12227), (309, 12254), (314, 12275), (316, 12281), (320, 12302), (324, 12329), (328, 12401), (349, 12536), (369, 12617), (378, 12641), (385, 12656), (400, 12686), (401, 12689), (408, 12740), (419, 12821), (420, 12824), (426, 12857), (429, 12887), (431, 12911), (442, 12977), (478, 13244), (481, 13262), (486, 13292), (489, 13337), (490, 13340), (492, 13355), (493, 13364), (501, 13400), (502, 13409), (503, 13418), (510, 13469), (523, 13541), (528, 13559), (536, 13580), (545, 13679), (546, 13682), (553, 13715), (561, 13781), (562, 13799), (564, 13814), (569, 13847), (577, 13898), (586, 13949), (617, 14192), (618, 14195), (629, 14267), (630, 14270), (638, 14336), (639, 14339), (641, 14357), (649, 14417), (656, 14474), (657, 14492), (666, 14573), (667, 14576), (670, 14591), (686, 14750), (696, 14804), (700, 14870), (701, 14876), (710, 14936), (711, 14942), (716, 14993), (725, 15065), (731, 15089), (735, 15107), (738, 15131), (739, 15137), (742, 15158), (749, 15197), (762, 15338), (765, 15350), (772, 15401), (774, 15419), (789, 15569),

Gene: Opie_17 Start: 10940, Stop: 16069, Start Num: 20

Candidate Starts for Opie_17:

(Start: 20 @10940 has 13 MA's), (Start: 23 @10949 has 36 MA's), (49, 11222), (51, 11231), (67, 11327), (76, 11369), (84, 11390), (99, 11483), (102, 11501), (129, 11696), (148, 11855), (170, 11975), (171, 11978), (178, 12014), (188, 12092), (198, 12215), (201, 12248), (205, 12257), (207, 12266), (210, 12299), (212, 12311), (215, 12335), (222, 12380), (228, 12425), (233, 12461), (234, 12473), (236, 12491), (243, 12527), (258, 12650), (265, 12692), (283, 12827), (284, 12830), (285, 12833),

(287, 12848), (293, 12902), (298, 12941), (311, 13022), (316, 13037), (320, 13058), (322, 13073), (324, 13085), (325, 13121), (328, 13157), (353, 13319), (364, 13352), (382, 13376), (390, 13388), (391, 13391), (401, 13424), (403, 13442), (415, 13523), (416, 13529), (418, 13550), (419, 13553), (420, 13556), (433, 13655), (436, 13670), (441, 13694), (443, 13709), (444, 13712), (445, 13718), (452, 13772), (463, 13871), (470, 13913), (476, 13946), (483, 13991), (486, 14015), (491, 14060), (496, 14078), (512, 14186), (519, 14216), (530, 14255), (531, 14258), (534, 14267), (568, 14516), (574, 14540), (595, 14684), (598, 14708), (607, 14759), (625, 14876), (630, 14903), (633, 14921), (642, 14999), (644, 15005), (646, 15014), (648, 15041), (658, 15134), (664, 15173), (668, 15215), (687, 15368), (694, 15401), (695, 15404), (698, 15461), (702, 15470), (704, 15482), (708, 15503), (711, 15524), (740, 15716), (747, 15755), (756, 15821), (758, 15824), (761, 15878), (782, 16031),

Gene: Orla_18 Start: 10598, Stop: 14806, Start Num: 72

Candidate Starts for Orla_18:

(Start: 72 @10598 has 7 MA's), (Start: 78 @10625 has 1 MA's), (126, 10934), (133, 10991), (137, 11015), (141, 11060), (144, 11105), (149, 11123), (153, 11138), (156, 11156), (157, 11165), (167, 11219), (177, 11276), (189, 11357), (194, 11405), (196, 11444), (198, 11459), (200, 11468), (204, 11495), (208, 11525), (211, 11546), (230, 11669), (238, 11735), (248, 11798), (261, 11885), (274, 11954), (287, 12062), (289, 12083), (293, 12116), (294, 12134), (297, 12152), (300, 12176), (304, 12206), (316, 12251), (317, 12254), (320, 12272), (347, 12383), (349, 12395), (352, 12434), (369, 12476), (381, 12488), (385, 12500), (393, 12515), (401, 12548), (412, 12623), (419, 12677), (420, 12680), (422, 12698), (429, 12743), (433, 12782), (434, 12788), (439, 12812), (442, 12833), (443, 12836), (444, 12839), (459, 12965), (460, 12986), (462, 12995), (464, 13004), (465, 13010), (488, 13163), (500, 13208), (506, 13232), (508, 13238), (514, 13274), (521, 13307), (526, 13331), (542, 13382), (549, 13427), (567, 13565), (572, 13595), (603, 13787), (632, 13964), (691, 14156), (703, 14228), (710, 14264), (713, 14288), (715, 14300), (718, 14342), (725, 14390), (738, 14453), (742, 14480), (744, 14486), (749, 14519), (751, 14540), (753, 14567), (758, 14591), (760, 14627), (762, 14654), (764, 14663), (766, 14675), (779, 14777),

Gene: PCoral7_17 Start: 10271, Stop: 15886, Start Num: 4

Candidate Starts for PCoral7_17:

(Start: 3 @10235 has 1 MA's), (Start: 4 @10271 has 38 MA's), (Start: 7 @10292 has 1 MA's), (10, 10331), (13, 10376), (29, 10466), (31, 10475), (33, 10487), (35, 10508), (39, 10565), (42, 10637), (44, 10658), (51, 10700), (52, 10703), (54, 10730), (58, 10751), (59, 10754), (63, 10775), (67, 10796), (79, 10847), (80, 10850), (90, 10910), (119, 11093), (129, 11165), (155, 11351), (173, 11453), (175, 11468), (178, 11483), (184, 11540), (206, 11732), (222, 11852), (233, 11933), (236, 11963), (243, 11999), (249, 12050), (269, 12185), (270, 12188), (274, 12212), (280, 12263), (283, 12299), (285, 12305), (287, 12320), (293, 12374), (298, 12413), (301, 12437), (303, 12455), (314, 12503), (316, 12509), (319, 12527), (320, 12530), (322, 12545), (324, 12557), (326, 12605), (349, 12743), (358, 12824), (361, 12848), (362, 12860), (363, 12863), (371, 12896), (394, 12998), (399, 13025), (400, 13028), (401, 13031), (402, 13037), (408, 13082), (410, 13094), (412, 13106), (415, 13130), (417, 13145), (419, 13160), (420, 13163), (424, 13187), (427, 13214), (439, 13295), (451, 13379), (463, 13484), (469, 13517), (478, 13583), (479, 13592), (486, 13631), (487, 13664), (489, 13676), (490, 13679), (492, 13694), (493, 13703), (501, 13739), (502, 13748), (503, 13757), (533, 13913), (534, 13916), (536, 13919), (537, 13940), (546, 14021), (554, 14063), (564, 14150), (569, 14183), (570, 14192), (577, 14234), (594, 14348), (615, 14513), (629, 14597), (630, 14600), (634, 14630), (635, 14633), (638, 14666), (639, 14669), (649, 14747), (656, 14804), (670, 14921), (675, 14972), (690, 15074), (696, 15107), (700, 15173), (710, 15239), (711, 15245), (713, 15263), (716, 15296), (725, 15368), (735, 15410), (736, 15416), (738, 15434), (739, 15440), (742, 15461), (749, 15500), (762, 15641), (772, 15704), (780, 15779), (789, 15872),

Gene: Periwinkle_20 Start: 10340, Stop: 15973, Start Num: 15

Candidate Starts for Periwinkle_20:

(12, 10313), (Start: 15 @10340 has 1 MA's), (Start: 26 @10385 has 1 MA's), (28, 10406), (32, 10427), (36, 10472), (Start: 37 @10487 has 1 MA's), (42, 10571), (48, 10613), (49, 10625), (59, 10688), (62, 10703), (64, 10712), (67, 10730), (68, 10736), (80, 10784), (88, 10838), (105, 10919), (122, 11063), (123, 11069), (129, 11099), (160, 11318), (173, 11393), (178, 11423), (195, 11606), (198, 11627), (206, 11672), (207, 11678), (209, 11699), (220, 11780), (229, 11846), (233, 11873), (234, 11885), (236, 11903), (237, 11915), (243, 11939), (246, 11951), (249, 11990), (250, 11993), (251, 12002), (254, 12032), (260, 12077), (271, 12137), (274, 12152), (277, 12182), (278, 12194), (283, 12239), (285, 12245), (286, 12257), (287, 12260), (289, 12281), (292, 12311), (293, 12314), (301, 12377), (304, 12404), (305, 12407), (306, 12410), (307, 12416), (313, 12440), (314, 12443), (316, 12449), (318, 12455), (320, 12470), (323, 12488), (328, 12569), (334, 12617), (335, 12623), (339, 12650), (361, 12809), (362, 12821), (371, 12857), (386, 12917), (393, 12956), (395, 12962), (396, 12965), (400, 12986), (401, 12989), (415, 13088), (421, 13127), (425, 13151), (429, 13184), (432, 13229), (438, 13283), (446, 13370), (447, 13391), (453, 13427), (457, 13457), (467, 13538), (469, 13547), (473, 13571), (485, 13652), (486, 13658), (489, 13703), (490, 13706), (501, 13766), (502, 13775), (503, 13784), (521, 13892), (533, 13940), (536, 13946), (545, 14045), (546, 14048), (551, 14060), (564, 14177), (569, 14210), (577, 14261), (584, 14291), (590, 14351), (600, 14432), (605, 14453), (609, 14486), (619, 14549), (620, 14558), (621, 14567), (639, 14681), (643, 14711), (645, 14720), (650, 14759), (651, 14762), (654, 14792), (655, 14813), (677, 15017), (683, 15080), (684, 15086), (694, 15137), (714, 15323), (723, 15410), (728, 15437), (729, 15440), (743, 15515), (747, 15539), (752, 15578), (754, 15614), (759, 15635), (767, 15722), (770, 15764), (775, 15797), (776, 15809), (786, 15887), (790, 15953),

Gene: Petra_19 Start: 10705, Stop: 16197, Start Num: 9

Candidate Starts for Petra_19:

(Start: 4 @10654 has 38 MA's), (Start: 6 @10669 has 1 MA's), (Start: 7 @10675 has 1 MA's), (Start: 9 @10705 has 1 MA's), (10, 10714), (11, 10717), (13, 10759), (33, 10870), (35, 10891), (56, 11119), (59, 11137), (63, 11158), (64, 11161), (67, 11179), (73, 11203), (88, 11287), (98, 11329), (100, 11344), (102, 11353), (124, 11521), (129, 11548), (143, 11665), (173, 11836), (178, 11866), (198, 12070), (206, 12115), (229, 12289), (233, 12316), (236, 12346), (249, 12433), (254, 12475), (256, 12481), (274, 12595), (276, 12610), (278, 12637), (283, 12682), (285, 12688), (287, 12703), (293, 12757), (298, 12796), (300, 12817), (301, 12820), (303, 12838), (309, 12865), (314, 12886), (316, 12892), (320, 12913), (324, 12940), (365, 13213), (378, 13252), (385, 13267), (400, 13297), (401, 13300), (408, 13351), (419, 13432), (420, 13435), (426, 13468), (429, 13498), (442, 13588), (478, 13855), (486, 13903), (489, 13948), (490, 13951), (492, 13966), (493, 13975), (501, 14011), (502, 14020), (503, 14029), (510, 14080), (523, 14152), (528, 14170), (536, 14191), (545, 14290), (546, 14293), (553, 14326), (561, 14392), (562, 14410), (564, 14425), (569, 14458), (577, 14509), (586, 14560), (617, 14803), (618, 14806), (629, 14878), (630, 14881), (638, 14947), (639, 14950), (641, 14968), (649, 15028), (656, 15085), (657, 15103), (666, 15184), (667, 15187), (670, 15202), (686, 15361), (696, 15415), (700, 15481), (710, 15547), (711, 15553), (725, 15676), (731, 15700), (735, 15718), (738, 15742), (739, 15748), (742, 15769), (749, 15808), (762, 15949), (765, 15961), (772, 16012), (774, 16030), (780, 16087), (789, 16180),

Gene: Phabuloso_18 Start: 9869, Stop: 15502, Start Num: 16

Candidate Starts for Phabuloso_18:

(Start: 16 @9869 has 11 MA's), (24, 9896), (Start: 26 @9914 has 1 MA's), (28, 9935), (32, 9956), (36, 10001), (Start: 37 @10016 has 1 MA's), (42, 10100), (48, 10142), (49, 10154), (59, 10217), (62, 10232), (64, 10241), (67, 10259), (68, 10265), (80, 10313), (105, 10448), (123, 10598), (129, 10628), (160, 10847), (173, 10922), (178, 10952), (198, 11156), (205, 11198), (206, 11201), (207, 11207), (209, 11228), (220, 11309), (229, 11375), (233, 11402), (234, 11414), (236, 11432), (237, 11444), (243, 11468), (246, 11480), (249, 11519), (250, 11522), (251, 11531), (254, 11561), (260, 11606), (271, 11666), (274, 11681), (277, 11711), (278, 11723), (283, 11768), (285, 11774), (287, 11789), (290, 11819), (292, 11840), (293, 11843), (301, 11906), (304, 11933), (305, 11936), (306, 11939), (307, 11945), (313, 11969), (314, 11972), (316, 11978), (318, 11984), (320, 11999), (323, 12017),

(328, 12098), (334, 12146), (335, 12152), (339, 12179), (361, 12338), (362, 12350), (371, 12386), (386, 12446), (393, 12485), (395, 12491), (396, 12494), (400, 12515), (401, 12518), (415, 12617), (421, 12656), (425, 12680), (429, 12713), (432, 12758), (438, 12812), (446, 12899), (447, 12920), (453, 12956), (457, 12986), (466, 13064), (467, 13067), (469, 13076), (473, 13100), (485, 13181), (486, 13187), (489, 13232), (490, 13235), (492, 13250), (501, 13295), (502, 13304), (503, 13313), (504, 13316), (521, 13421), (533, 13469), (536, 13475), (545, 13574), (546, 13577), (551, 13589), (564, 13706), (569, 13739), (577, 13790), (584, 13820), (590, 13880), (600, 13961), (605, 13982), (609, 14015), (619, 14078), (621, 14096), (639, 14210), (643, 14240), (645, 14249), (650, 14288), (651, 14291), (654, 14321), (655, 14342), (671, 14495), (677, 14546), (683, 14609), (684, 14615), (694, 14666), (714, 14852), (723, 14939), (728, 14966), (729, 14969), (743, 15044), (747, 15068), (752, 15107), (754, 15143), (759, 15164), (767, 15251), (770, 15293), (775, 15326), (776, 15338), (786, 15416), (790, 15482),

Gene: Phistory_19 Start: 10653, Stop: 16280, Start Num: 14

Candidate Starts for Phistory_19:

(Start: 14 @10653 has 1 MA's), (19, 10659), (Start: 26 @10698 has 1 MA's), (36, 10785), (42, 10884), (48, 10926), (49, 10938), (59, 11001), (62, 11016), (64, 11025), (67, 11043), (68, 11049), (80, 11097), (92, 11172), (105, 11232), (123, 11382), (129, 11412), (173, 11706), (178, 11736), (195, 11919), (198, 11940), (205, 11982), (206, 11985), (207, 11991), (209, 12012), (210, 12024), (219, 12084), (222, 12105), (229, 12159), (233, 12186), (234, 12198), (236, 12216), (237, 12228), (243, 12252), (246, 12264), (249, 12303), (250, 12306), (251, 12315), (255, 12348), (265, 12417), (269, 12438), (274, 12465), (275, 12471), (278, 12507), (279, 12510), (283, 12552), (285, 12558), (286, 12570), (287, 12573), (292, 12624), (293, 12627), (301, 12690), (302, 12699), (304, 12717), (305, 12720), (307, 12729), (316, 12762), (320, 12783), (321, 12789), (322, 12798), (325, 12846), (329, 12888), (334, 12930), (339, 12963), (348, 13014), (349, 13017), (352, 13056), (353, 13065), (361, 13122), (362, 13134), (371, 13170), (386, 13230), (393, 13269), (395, 13275), (400, 13299), (401, 13302), (403, 13320), (415, 13401), (425, 13464), (429, 13497), (433, 13572), (438, 13596), (439, 13608), (442, 13641), (447, 13704), (453, 13740), (457, 13770), (466, 13848), (467, 13851), (469, 13860), (473, 13884), (486, 13971), (489, 14016), (490, 14019), (492, 14034), (501, 14079), (502, 14088), (503, 14097), (504, 14100), (521, 14205), (533, 14253), (536, 14259), (545, 14358), (546, 14361), (551, 14373), (564, 14490), (569, 14523), (577, 14574), (584, 14604), (590, 14664), (600, 14745), (605, 14766), (606, 14769), (619, 14862), (621, 14880), (639, 14994), (643, 15024), (645, 15033), (650, 15072), (651, 15075), (654, 15105), (655, 15126), (677, 15324), (683, 15387), (684, 15393), (688, 15420), (694, 15444), (714, 15630), (723, 15717), (728, 15744), (729, 15747), (743, 15822), (747, 15846), (752, 15885), (754, 15921), (759, 15942), (767, 16029), (770, 16071), (775, 16104), (776, 16116), (786, 16194), (790, 16260),

Gene: PhrostedPhlake_18 Start: 10632, Stop: 16172, Start Num: 4

Candidate Starts for PhrostedPhlake_18:

(Start: 4 @10632 has 38 MA's), (Start: 6 @10647 has 1 MA's), (Start: 7 @10653 has 1 MA's), (Start: 9 @10683 has 1 MA's), (10, 10692), (13, 10737), (33, 10848), (35, 10869), (56, 11097), (59, 11115), (63, 11136), (64, 11139), (67, 11157), (73, 11181), (88, 11265), (90, 11271), (98, 11307), (100, 11322), (102, 11331), (111, 11391), (124, 11499), (129, 11526), (143, 11643), (152, 11697), (160, 11739), (173, 11814), (178, 11844), (198, 12048), (206, 12093), (229, 12267), (233, 12294), (236, 12324), (249, 12411), (254, 12453), (263, 12516), (274, 12573), (278, 12615), (283, 12660), (285, 12666), (287, 12681), (293, 12735), (298, 12774), (300, 12795), (301, 12798), (303, 12816), (309, 12843), (314, 12864), (316, 12870), (320, 12891), (324, 12918), (378, 13230), (385, 13245), (400, 13275), (401, 13278), (408, 13329), (419, 13410), (420, 13413), (426, 13446), (429, 13476), (442, 13566), (478, 13833), (486, 13881), (487, 13914), (489, 13926), (490, 13929), (492, 13944), (493, 13953), (501, 13989), (502, 13998), (503, 14007), (521, 14115), (533, 14163), (534, 14166), (536, 14169), (546, 14271), (547, 14274), (564, 14400), (569, 14433), (576, 14481), (577, 14484), (586, 14535), (594, 14604), (617, 14778), (618, 14781), (629, 14853), (630, 14856), (638, 14922), (639, 14925), (641, 14943), (649, 15003), (656, 15060), (657, 15078), (666, 15159), (667, 15162), (670, 15177),

(686, 15336), (696, 15390), (700, 15456), (710, 15522), (711, 15528), (715, 15558), (725, 15651), (731, 15675), (735, 15693), (738, 15717), (739, 15723), (742, 15744), (749, 15783), (762, 15924), (772, 15987), (774, 16005), (789, 16155),

Gene: Pipp_17 Start: 10133, Stop: 15790, Start Num: 2

Candidate Starts for Pipp_17:

(1, 10094), (Start: 2 @10133 has 1 MA's), (Start: 4 @10247 has 38 MA's), (Start: 6 @10262 has 1 MA's), (Start: 7 @10268 has 1 MA's), (Start: 9 @10298 has 1 MA's), (10, 10307), (11, 10310), (13, 10352), (33, 10463), (35, 10484), (59, 10730), (63, 10751), (64, 10754), (67, 10772), (73, 10796), (88, 10880), (90, 10886), (98, 10922), (100, 10937), (102, 10946), (105, 10961), (111, 11006), (124, 11114), (129, 11141), (132, 11174), (143, 11258), (178, 11459), (198, 11663), (207, 11714), (209, 11735), (210, 11747), (224, 11837), (229, 11882), (233, 11909), (236, 11939), (249, 12026), (250, 12029), (254, 12068), (265, 12140), (274, 12188), (278, 12230), (283, 12275), (285, 12281), (286, 12293), (287, 12296), (293, 12350), (298, 12389), (300, 12410), (301, 12413), (303, 12431), (309, 12458), (314, 12479), (316, 12485), (320, 12506), (349, 12740), (365, 12806), (378, 12845), (385, 12860), (400, 12890), (401, 12893), (408, 12944), (419, 13025), (420, 13028), (426, 13061), (429, 13091), (442, 13181), (469, 13382), (478, 13448), (486, 13496), (489, 13541), (490, 13544), (492, 13559), (493, 13568), (501, 13604), (502, 13613), (503, 13622), (523, 13745), (536, 13784), (545, 13883), (546, 13886), (561, 13985), (562, 14003), (564, 14018), (569, 14051), (577, 14102), (586, 14153), (594, 14222), (617, 14396), (618, 14399), (628, 14465), (629, 14471), (630, 14474), (638, 14540), (639, 14543), (641, 14561), (649, 14621), (656, 14678), (657, 14696), (666, 14777), (670, 14795), (675, 14846), (686, 14954), (696, 15008), (700, 15074), (709, 15128), (710, 15140), (711, 15146), (715, 15176), (725, 15269), (731, 15293), (735, 15311), (738, 15335), (739, 15341), (742, 15362), (749, 15401), (762, 15542), (772, 15605), (774, 15623), (780, 15680), (789, 15773),

Gene: Pons_16 Start: 9384, Stop: 14465, Start Num: 23

Candidate Starts for Pons_16:

(Start: 23 @9384 has 36 MA's), (40, 9540), (52, 9669), (55, 9699), (68, 9768), (71, 9780), (75, 9795), (80, 9816), (84, 9825), (87, 9867), (90, 9876), (98, 9912), (102, 9936), (111, 9996), (118, 10050), (121, 10089), (122, 10095), (126, 10110), (129, 10131), (136, 10185), (152, 10302), (164, 10365), (170, 10410), (178, 10449), (182, 10491), (198, 10650), (201, 10683), (206, 10695), (209, 10722), (216, 10779), (221, 10809), (223, 10821), (235, 10923), (236, 10926), (249, 11013), (256, 11061), (274, 11175), (280, 11226), (285, 11268), (287, 11283), (288, 11292), (289, 11304), (293, 11337), (299, 11379), (307, 11439), (308, 11442), (309, 11445), (310, 11451), (315, 11469), (320, 11493), (329, 11598), (338, 11646), (349, 11706), (350, 11709), (352, 11745), (363, 11826), (370, 11856), (375, 11877), (376, 11880), (377, 11883), (394, 11961), (399, 11985), (401, 11991), (418, 12117), (424, 12147), (429, 12186), (435, 12234), (439, 12255), (440, 12258), (441, 12264), (449, 12330), (456, 12375), (459, 12408), (460, 12429), (471, 12483), (497, 12633), (499, 12642), (511, 12729), (567, 13047), (573, 13077), (595, 13215), (608, 13296), (632, 13446), (636, 13476), (672, 13686), (673, 13695), (674, 13701), (681, 13737), (699, 13854), (701, 13860), (707, 13902), (711, 13920), (725, 14043), (731, 14067), (733, 14082), (738, 14112), (742, 14139), (744, 14145), (749, 14178), (756, 14247), (758, 14250), (760, 14286), (768, 14358), (771, 14376),

Gene: PotPie_16 Start: 10237, Stop: 15330, Start Num: 23

Candidate Starts for PotPie_16:

(Start: 23 @10237 has 36 MA's), (40, 10393), (52, 10522), (55, 10552), (68, 10621), (71, 10633), (80, 10669), (84, 10678), (87, 10720), (90, 10729), (98, 10765), (102, 10789), (118, 10903), (121, 10942), (126, 10963), (129, 10984), (152, 11155), (164, 11218), (170, 11263), (182, 11344), (198, 11503), (201, 11536), (206, 11548), (209, 11575), (216, 11632), (221, 11662), (223, 11674), (235, 11776), (236, 11779), (249, 11866), (256, 11914), (274, 12028), (285, 12121), (287, 12136), (289, 12157), (293, 12190), (296, 12220), (299, 12232), (303, 12271), (308, 12295), (309, 12298), (315, 12322), (320, 12346), (329, 12451), (342, 12529), (349, 12559), (350, 12562), (352, 12598), (358, 12640), (361, 12664), (363, 12679), (366, 12694), (370, 12709), (376, 12733), (386, 12772), (388, 12787),

(389, 12793), (399, 12838), (401, 12844), (418, 12970), (424, 13000), (430, 13051), (435, 13087), (439, 13108), (440, 13111), (449, 13183), (456, 13228), (459, 13261), (460, 13282), (471, 13336), (482, 13411), (499, 13495), (511, 13582), (567, 13900), (573, 13930), (595, 14068), (604, 14119), (608, 14149), (632, 14314), (636, 14344), (669, 14524), (674, 14575), (681, 14602), (685, 14623), (699, 14719), (707, 14767), (711, 14785), (725, 14908), (731, 14932), (733, 14947), (738, 14977), (742, 15004), (744, 15010), (749, 15043), (756, 15112), (758, 15115), (760, 15151), (771, 15241),

Gene: PrincePatrick_17 Start: 10339, Stop: 15960, Start Num: 4

Candidate Starts for PrincePatrick_17:

(Start: 3 @10303 has 1 MA's), (Start: 4 @10339 has 38 MA's), (Start: 7 @10360 has 1 MA's), (10, 10399), (13, 10444), (29, 10534), (31, 10543), (33, 10555), (35, 10576), (39, 10633), (42, 10705), (44, 10726), (51, 10768), (52, 10771), (54, 10798), (58, 10819), (59, 10822), (63, 10843), (67, 10864), (79, 10915), (80, 10918), (90, 10978), (119, 11161), (129, 11233), (155, 11419), (173, 11521), (175, 11536), (178, 11551), (184, 11608), (206, 11800), (222, 11920), (233, 12001), (236, 12031), (243, 12067), (249, 12118), (254, 12160), (265, 12232), (272, 12268), (274, 12280), (280, 12331), (285, 12373), (287, 12388), (293, 12442), (298, 12481), (301, 12505), (303, 12523), (314, 12571), (316, 12577), (319, 12595), (320, 12598), (322, 12613), (324, 12625), (326, 12673), (329, 12703), (341, 12778), (358, 12892), (361, 12916), (362, 12928), (363, 12931), (371, 12964), (394, 13066), (401, 13099), (408, 13150), (410, 13162), (412, 13174), (415, 13198), (420, 13234), (424, 13258), (427, 13285), (439, 13366), (451, 13450), (463, 13555), (469, 13588), (478, 13654), (479, 13663), (486, 13702), (487, 13735), (489, 13747), (490, 13750), (492, 13765), (493, 13774), (501, 13810), (502, 13819), (503, 13828), (509, 13870), (533, 13984), (534, 13987), (536, 13990), (537, 14011), (546, 14092), (554, 14134), (564, 14221), (569, 14254), (570, 14263), (577, 14305), (594, 14419), (629, 14668), (630, 14671), (634, 14701), (635, 14704), (637, 14728), (638, 14737), (639, 14740), (649, 14818), (656, 14875), (670, 14992), (675, 15043), (696, 15181), (700, 15247), (710, 15313), (711, 15319), (713, 15337), (723, 15430), (725, 15442), (736, 15490), (738, 15508), (739, 15514), (742, 15535), (749, 15574), (762, 15715), (772, 15778), (780, 15853), (789, 15946),

Gene: PsychoKiller_16 Start: 9629, Stop: 14767, Start Num: 23

Candidate Starts for PsychoKiller_16:

(Start: 17 @9605 has 5 MA's), (Start: 23 @9629 has 36 MA's), (27, 9656), (40, 9785), (43, 9860), (68, 10013), (69, 10016), (87, 10112), (90, 10121), (96, 10151), (98, 10157), (100, 10172), (101, 10175), (105, 10196), (114, 10268), (116, 10289), (126, 10355), (129, 10376), (143, 10493), (170, 10655), (178, 10694), (187, 10769), (201, 10928), (206, 10940), (209, 10967), (214, 11012), (216, 11024), (229, 11114), (231, 11132), (234, 11153), (237, 11183), (243, 11207), (246, 11219), (249, 11258), (253, 11291), (269, 11393), (270, 11396), (274, 11420), (285, 11513), (287, 11528), (291, 11567), (311, 11702), (312, 11705), (320, 11738), (330, 11846), (331, 11849), (336, 11900), (350, 11975), (361, 12077), (370, 12122), (375, 12143), (376, 12146), (377, 12149), (393, 12224), (401, 12257), (404, 12278), (408, 12308), (415, 12356), (416, 12362), (420, 12389), (440, 12524), (456, 12641), (459, 12674), (460, 12695), (474, 12764), (475, 12770), (477, 12785), (497, 12905), (499, 12914), (511, 12998), (567, 13319), (602, 13538), (608, 13574), (639, 13787), (673, 13979), (681, 14027), (685, 14048), (699, 14156), (711, 14222), (713, 14240), (725, 14345), (732, 14375), (733, 14384), (738, 14414), (749, 14480), (753, 14528), (760, 14588), (770, 14675), (779, 14738),

Gene: Quasar_16 Start: 10238, Stop: 15376, Start Num: 23

Candidate Starts for Quasar_16:

(Start: 17 @10214 has 5 MA's), (Start: 23 @10238 has 36 MA's), (27, 10265), (40, 10394), (43, 10469), (68, 10622), (69, 10625), (87, 10721), (90, 10730), (96, 10760), (98, 10766), (100, 10781), (101, 10784), (105, 10805), (114, 10877), (116, 10898), (126, 10964), (129, 10985), (143, 11102), (170, 11264), (178, 11303), (187, 11378), (201, 11537), (206, 11549), (209, 11576), (214, 11621), (216, 11633), (229, 11723), (231, 11741), (234, 11762), (237, 11792), (243, 11816), (246, 11828), (249, 11867), (253, 11900), (269, 12002), (270, 12005), (274, 12029), (275, 12035), (285, 12122), (287, 12137), (291, 12176), (312, 12314), (319, 12344), (320, 12347), (330, 12455), (331, 12458), (336,

12509), (350, 12584), (361, 12686), (370, 12731), (375, 12752), (376, 12755), (377, 12758), (393, 12833), (401, 12866), (404, 12887), (408, 12917), (415, 12965), (416, 12971), (420, 12998), (440, 13133), (456, 13250), (459, 13283), (460, 13304), (461, 13307), (474, 13373), (475, 13379), (477, 13394), (497, 13514), (499, 13523), (511, 13607), (567, 13928), (602, 14147), (608, 14183), (639, 14396), (673, 14588), (681, 14636), (685, 14657), (699, 14765), (711, 14831), (713, 14849), (725, 14954), (732, 14984), (733, 14993), (738, 15023), (749, 15089), (753, 15137), (760, 15197), (770, 15284), (779, 15347),

Gene: RADical_17 Start: 9630, Stop: 14768, Start Num: 23

Candidate Starts for RADical_17:

(Start: 17 @9606 has 5 MA's), (Start: 23 @9630 has 36 MA's), (27, 9657), (40, 9786), (43, 9861), (68, 10014), (69, 10017), (87, 10113), (90, 10122), (96, 10152), (98, 10158), (100, 10173), (101, 10176), (104, 10191), (105, 10197), (114, 10269), (116, 10290), (126, 10356), (129, 10377), (143, 10494), (170, 10656), (178, 10695), (187, 10770), (201, 10929), (206, 10941), (209, 10968), (214, 11013), (216, 11025), (229, 11115), (231, 11133), (234, 11154), (237, 11184), (243, 11208), (246, 11220), (249, 11259), (253, 11292), (269, 11394), (270, 11397), (274, 11421), (285, 11514), (287, 11529), (291, 11568), (303, 11664), (305, 11676), (312, 11706), (320, 11739), (330, 11847), (331, 11850), (336, 11901), (350, 11976), (361, 12078), (370, 12123), (375, 12144), (376, 12147), (377, 12150), (393, 12225), (401, 12258), (404, 12279), (415, 12357), (416, 12363), (420, 12390), (440, 12525), (456, 12642), (459, 12675), (460, 12696), (474, 12765), (475, 12771), (477, 12786), (497, 12906), (499, 12915), (511, 12999), (567, 13320), (602, 13539), (608, 13575), (639, 13788), (673, 13980), (681, 14028), (685, 14049), (699, 14157), (711, 14223), (713, 14241), (719, 14301), (725, 14346), (732, 14376), (733, 14385), (738, 14415), (749, 14481), (753, 14529), (760, 14589), (770, 14676), (779, 14739),

Gene: RSchmailzl_17 Start: 9773, Stop: 14911, Start Num: 23

Candidate Starts for RSchmailzl_17:

(Start: 17 @9749 has 5 MA's), (Start: 23 @9773 has 36 MA's), (27, 9800), (40, 9929), (43, 10004), (68, 10157), (69, 10160), (87, 10256), (90, 10265), (96, 10295), (98, 10301), (100, 10316), (101, 10319), (105, 10340), (114, 10412), (116, 10433), (126, 10499), (129, 10520), (143, 10637), (170, 10799), (178, 10838), (187, 10913), (201, 11072), (206, 11084), (209, 11111), (214, 11156), (216, 11168), (229, 11258), (231, 11276), (234, 11297), (237, 11327), (243, 11351), (246, 11363), (249, 11402), (253, 11435), (255, 11447), (269, 11537), (270, 11540), (274, 11564), (275, 11570), (285, 11657), (287, 11672), (291, 11711), (298, 11765), (303, 11807), (305, 11819), (310, 11840), (320, 11882), (330, 11990), (337, 12050), (350, 12119), (359, 12209), (361, 12221), (370, 12266), (375, 12287), (376, 12290), (377, 12293), (393, 12368), (398, 12386), (401, 12401), (408, 12452), (415, 12500), (416, 12506), (420, 12533), (440, 12668), (456, 12785), (459, 12818), (460, 12839), (461, 12842), (474, 12908), (475, 12914), (477, 12929), (497, 13049), (499, 13058), (511, 13142), (567, 13463), (602, 13682), (608, 13718), (639, 13931), (673, 14123), (681, 14171), (685, 14192), (699, 14300), (711, 14366), (713, 14384), (725, 14489), (732, 14519), (733, 14528), (738, 14558), (749, 14624), (753, 14672), (760, 14732), (770, 14819), (779, 14882),

Gene: RanchParmCat_19 Start: 10311, Stop: 14516, Start Num: 72

Candidate Starts for RanchParmCat_19:

(Start: 72 @10311 has 7 MA's), (Start: 78 @10338 has 1 MA's), (121, 10626), (126, 10647), (127, 10653), (131, 10686), (133, 10704), (137, 10728), (144, 10818), (146, 10827), (149, 10836), (156, 10869), (161, 10896), (163, 10905), (166, 10929), (192, 11082), (196, 11145), (198, 11160), (204, 11196), (208, 11226), (211, 11247), (218, 11289), (230, 11370), (241, 11445), (242, 11454), (247, 11475), (268, 11622), (287, 11763), (289, 11784), (292, 11814), (293, 11817), (294, 11835), (298, 11856), (300, 11877), (303, 11898), (315, 11949), (316, 11952), (317, 11955), (320, 11973), (340, 12054), (347, 12084), (352, 12135), (381, 12189), (393, 12216), (401, 12249), (409, 12309), (419, 12378), (420, 12381), (433, 12483), (434, 12489), (443, 12537), (444, 12540), (456, 12633), (459, 12666), (460, 12687), (462, 12696), (464, 12705), (465, 12711), (488, 12864), (506, 12933), (508,

12939), (514, 12975), (548, 13104), (567, 13245), (571, 13269), (578, 13314), (603, 13467), (604, 13470), (632, 13659), (636, 13689), (691, 13866), (703, 13938), (707, 13962), (710, 13974), (713, 13998), (715, 14010), (724, 14094), (725, 14100), (735, 14142), (738, 14163), (744, 14196), (749, 14229), (751, 14250), (753, 14277), (758, 14301), (760, 14337), (766, 14385), (779, 14487),

Gene: RedBaron_18 Start: 9673, Stop: 14811, Start Num: 23

Candidate Starts for RedBaron_18:

(Start: 17 @9649 has 5 MA's), (Start: 23 @9673 has 36 MA's), (27, 9700), (40, 9829), (43, 9904), (68, 10057), (69, 10060), (87, 10156), (90, 10165), (96, 10195), (98, 10201), (100, 10216), (101, 10219), (105, 10240), (114, 10312), (116, 10333), (126, 10399), (129, 10420), (143, 10537), (170, 10699), (178, 10738), (187, 10813), (209, 11011), (225, 11119), (234, 11197), (236, 11215), (239, 11233), (249, 11302), (250, 11305), (251, 11314), (255, 11347), (273, 11458), (274, 11464), (285, 11557), (287, 11572), (303, 11707), (310, 11740), (320, 11782), (330, 11890), (336, 11944), (349, 12016), (350, 12019), (361, 12121), (370, 12166), (372, 12175), (375, 12187), (376, 12190), (377, 12193), (393, 12268), (394, 12271), (395, 12274), (398, 12286), (399, 12295), (401, 12301), (406, 12343), (408, 12352), (415, 12400), (420, 12433), (440, 12568), (456, 12685), (459, 12718), (460, 12739), (474, 12808), (475, 12814), (497, 12949), (499, 12958), (511, 13042), (567, 13363), (602, 13582), (608, 13618), (673, 14023), (681, 14071), (685, 14092), (699, 14200), (711, 14266), (713, 14284), (725, 14389), (732, 14419), (733, 14428), (738, 14458), (749, 14524), (753, 14572), (760, 14632), (770, 14719), (779, 14782),

Gene: Samba_17 Start: 10382, Stop: 15874, Start Num: 4

Candidate Starts for Samba_17:

(Start: 4 @10382 has 38 MA's), (Start: 6 @10397 has 1 MA's), (Start: 7 @10403 has 1 MA's), (Start: 9 @10433 has 1 MA's), (10, 10442), (11, 10445), (13, 10487), (33, 10598), (35, 10619), (41, 10739), (46, 10781), (56, 10847), (59, 10865), (62, 10880), (63, 10886), (64, 10889), (67, 10907), (73, 10931), (88, 11015), (98, 11057), (100, 11072), (102, 11081), (124, 11249), (129, 11276), (143, 11393), (173, 11564), (178, 11594), (198, 11798), (206, 11843), (209, 11870), (210, 11882), (224, 11972), (229, 12017), (233, 12044), (236, 12074), (249, 12161), (254, 12203), (263, 12266), (265, 12275), (274, 12323), (278, 12365), (283, 12410), (285, 12416), (286, 12428), (287, 12431), (293, 12485), (298, 12524), (300, 12545), (301, 12548), (303, 12566), (304, 12575), (314, 12614), (316, 12620), (319, 12638), (320, 12641), (324, 12668), (365, 12941), (373, 12968), (378, 12980), (384, 12992), (385, 12995), (400, 13025), (401, 13028), (408, 13079), (419, 13160), (420, 13163), (426, 13196), (429, 13226), (431, 13250), (442, 13316), (478, 13583), (486, 13631), (489, 13676), (490, 13679), (492, 13694), (501, 13739), (502, 13748), (503, 13757), (510, 13808), (523, 13880), (528, 13898), (536, 13919), (545, 14018), (546, 14021), (553, 14054), (561, 14120), (562, 14138), (564, 14153), (569, 14186), (577, 14237), (586, 14288), (617, 14531), (618, 14534), (629, 14606), (630, 14609), (638, 14675), (639, 14678), (641, 14696), (649, 14756), (666, 14912), (667, 14915), (670, 14930), (686, 15101), (696, 15155), (703, 15212), (706, 15227), (712, 15275), (717, 15320), (740, 15440), (741, 15449), (748, 15488), (757, 15560), (762, 15629), (772, 15692), (774, 15710), (789, 15860),

Gene: Schnabeltier_17 Start: 10933, Stop: 16047, Start Num: 20

Candidate Starts for Schnabeltier_17:

(Start: 20 @10933 has 13 MA's), (Start: 23 @10942 has 36 MA's), (49, 11215), (51, 11224), (54, 11254), (57, 11263), (67, 11320), (84, 11383), (93, 11455), (99, 11476), (102, 11494), (121, 11647), (129, 11689), (136, 11743), (140, 11776), (170, 11968), (171, 11971), (178, 12007), (188, 12085), (193, 12124), (198, 12208), (201, 12241), (205, 12250), (207, 12259), (210, 12292), (212, 12304), (215, 12328), (222, 12373), (224, 12382), (228, 12418), (229, 12427), (233, 12454), (234, 12466), (236, 12484), (243, 12520), (258, 12643), (265, 12685), (283, 12820), (284, 12823), (285, 12826), (287, 12841), (293, 12895), (298, 12934), (309, 13003), (311, 13015), (316, 13030), (320, 13051), (322, 13066), (324, 13078), (325, 13114), (328, 13150), (353, 13312), (382, 13369), (390, 13381), (391, 13384), (401, 13417), (414, 13510), (415, 13516), (416, 13522), (418, 13543), (419, 13546), (420, 13549), (429, 13612), (433, 13648), (436, 13663), (441, 13687), (443, 13702), (444, 13705),

(445, 13711), (452, 13765), (463, 13864), (470, 13906), (483, 13984), (486, 14008), (491, 14053), (512, 14179), (515, 14188), (518, 14206), (519, 14209), (530, 14248), (531, 14251), (534, 14260), (556, 14419), (572, 14539), (587, 14617), (595, 14665), (597, 14677), (607, 14737), (625, 14854), (630, 14881), (633, 14899), (642, 14977), (644, 14983), (646, 14992), (648, 15019), (658, 15112), (664, 15151), (668, 15193), (687, 15346), (694, 15379), (695, 15382), (698, 15439), (702, 15448), (704, 15460), (708, 15481), (711, 15502), (740, 15694), (747, 15733), (758, 15802), (761, 15856), (782, 16009),

Gene: ShawBrad_18 Start: 9931, Stop: 15516, Start Num: 26

Candidate Starts for ShawBrad_18:

(Start: 16 @9886 has 11 MA's), (Start: 26 @9931 has 1 MA's), (28, 9952), (32, 9973), (36, 10018), (Start: 37 @10033 has 1 MA's), (42, 10117), (48, 10159), (49, 10171), (59, 10234), (62, 10249), (64, 10258), (67, 10276), (68, 10282), (80, 10330), (105, 10465), (123, 10615), (129, 10645), (173, 10939), (178, 10969), (198, 11173), (205, 11215), (206, 11218), (207, 11224), (209, 11245), (220, 11326), (229, 11392), (233, 11419), (234, 11431), (236, 11449), (237, 11461), (243, 11485), (246, 11497), (249, 11536), (250, 11539), (251, 11548), (254, 11578), (260, 11623), (271, 11683), (274, 11698), (277, 11728), (278, 11740), (283, 11785), (285, 11791), (286, 11803), (287, 11806), (289, 11827), (292, 11857), (293, 11860), (301, 11923), (304, 11950), (305, 11953), (306, 11956), (307, 11962), (313, 11986), (314, 11989), (316, 11995), (318, 12001), (320, 12016), (323, 12034), (328, 12115), (334, 12163), (335, 12169), (339, 12196), (352, 12289), (356, 12322), (361, 12352), (374, 12415), (380, 12433), (386, 12460), (415, 12631), (425, 12694), (429, 12727), (433, 12802), (438, 12826), (439, 12838), (442, 12871), (447, 12934), (453, 12970), (457, 13000), (466, 13078), (467, 13081), (469, 13090), (486, 13201), (489, 13246), (490, 13249), (492, 13264), (501, 13309), (502, 13318), (503, 13327), (504, 13330), (521, 13435), (533, 13483), (536, 13489), (545, 13588), (546, 13591), (551, 13603), (564, 13720), (569, 13753), (577, 13804), (584, 13834), (590, 13894), (600, 13975), (605, 13996), (609, 14029), (619, 14092), (621, 14110), (639, 14224), (643, 14254), (645, 14263), (650, 14302), (651, 14305), (654, 14335), (655, 14356), (677, 14554), (683, 14617), (684, 14623), (694, 14674), (714, 14866), (723, 14953), (728, 14980), (729, 14983), (743, 15058), (747, 15082), (752, 15121), (754, 15157), (759, 15178), (767, 15265), (770, 15307), (775, 15340), (776, 15352), (790, 15496),

Gene: SheckWes_15 Start: 9372, Stop: 14465, Start Num: 23

Candidate Starts for SheckWes_15:

(Start: 23 @9372 has 36 MA's), (40, 9528), (48, 9633), (52, 9657), (59, 9708), (62, 9723), (68, 9756), (80, 9804), (84, 9813), (87, 9855), (89, 9861), (90, 9864), (98, 9900), (102, 9924), (108, 9951), (118, 10038), (121, 10077), (122, 10083), (126, 10098), (129, 10119), (136, 10173), (152, 10290), (164, 10353), (170, 10398), (178, 10437), (182, 10479), (198, 10641), (200, 10650), (201, 10674), (206, 10686), (209, 10713), (210, 10725), (216, 10770), (221, 10800), (223, 10812), (235, 10914), (236, 10917), (249, 11004), (252, 11031), (260, 11091), (266, 11121), (270, 11142), (274, 11166), (280, 11217), (285, 11259), (287, 11274), (288, 11283), (289, 11295), (293, 11328), (299, 11370), (307, 11430), (308, 11433), (309, 11436), (310, 11442), (315, 11460), (320, 11484), (327, 11568), (329, 11589), (338, 11637), (349, 11697), (350, 11700), (352, 11736), (361, 11802), (363, 11817), (370, 11847), (375, 11868), (376, 11871), (377, 11874), (394, 11952), (399, 11976), (401, 11982), (418, 12108), (424, 12138), (429, 12177), (435, 12225), (439, 12246), (440, 12249), (441, 12255), (449, 12321), (456, 12366), (459, 12399), (460, 12420), (471, 12474), (497, 12624), (499, 12633), (511, 12720), (548, 12897), (567, 13038), (573, 13068), (595, 13206), (608, 13287), (632, 13440), (636, 13470), (672, 13686), (673, 13695), (674, 13701), (681, 13737), (699, 13854), (701, 13860), (707, 13902), (711, 13920), (725, 14043), (731, 14067), (733, 14082), (738, 14112), (742, 14139), (744, 14145), (749, 14178), (756, 14247), (758, 14250), (760, 14286), (768, 14358), (769, 14361), (771, 14376),

Gene: SketchMex_15 Start: 9616, Stop: 14415, Start Num: 74

Candidate Starts for SketchMex_15:

(Start: 74 @9616 has 16 MA's), (Start: 81 @9643 has 1 MA's), (106, 9772), (120, 9874), (125, 9919), (128, 9931), (130, 9949), (132, 9976), (134, 9979), (135, 9994), (141, 10045), (142, 10048), (147, 10105), (149, 10108), (157, 10150), (161, 10168), (168, 10213), (176, 10249), (180, 10282), (185, 10315), (186, 10327), (194, 10381), (195, 10420), (197, 10435), (199, 10444), (202, 10471), (211, 10522), (218, 10564), (221, 10582), (223, 10591), (230, 10645), (240, 10708), (243, 10723), (251, 10786), (268, 10876), (273, 10903), (283, 10996), (285, 11002), (287, 11017), (291, 11056), (301, 11134), (306, 11167), (316, 11206), (319, 11224), (320, 11227), (324, 11254), (327, 11311), (329, 11332), (337, 11395), (342, 11431), (345, 11443), (350, 11464), (352, 11500), (358, 11542), (359, 11554), (361, 11566), (370, 11611), (371, 11614), (375, 11632), (376, 11635), (377, 11638), (393, 11713), (395, 11719), (401, 11746), (409, 11806), (412, 11821), (418, 11872), (419, 11875), (420, 11878), (422, 11896), (436, 11995), (439, 12010), (440, 12013), (459, 12163), (460, 12184), (468, 12226), (474, 12253), (475, 12259), (495, 12391), (499, 12403), (511, 12490), (519, 12532), (529, 12568), (543, 12643), (552, 12694), (557, 12733), (565, 12811), (575, 12862), (585, 12919), (606, 13057), (613, 13132), (636, 13276), (639, 13297), (662, 13474), (663, 13480), (699, 13804), (701, 13810), (711, 13870), (713, 13888), (716, 13921), (725, 13993), (733, 14032), (738, 14062), (749, 14128), (753, 14176), (760, 14236), (771, 14326), (779, 14386),

Gene: Socotra_17 Start: 9629, Stop: 14767, Start Num: 23

Candidate Starts for Socotra_17:

(Start: 17 @9605 has 5 MA's), (Start: 23 @9629 has 36 MA's), (27, 9656), (40, 9785), (43, 9860), (68, 10013), (69, 10016), (87, 10112), (90, 10121), (96, 10151), (98, 10157), (100, 10172), (101, 10175), (105, 10196), (114, 10268), (116, 10289), (126, 10355), (129, 10376), (143, 10493), (170, 10655), (178, 10694), (187, 10769), (201, 10928), (206, 10940), (209, 10967), (214, 11012), (216, 11024), (229, 11114), (231, 11132), (234, 11153), (237, 11183), (243, 11207), (246, 11219), (249, 11258), (253, 11291), (269, 11393), (270, 11396), (274, 11420), (285, 11513), (287, 11528), (291, 11567), (298, 11621), (303, 11663), (305, 11675), (312, 11705), (319, 11735), (320, 11738), (330, 11846), (331, 11849), (336, 11900), (350, 11975), (359, 12065), (361, 12077), (370, 12122), (375, 12143), (376, 12146), (377, 12149), (393, 12224), (401, 12257), (404, 12278), (408, 12308), (415, 12356), (416, 12362), (420, 12389), (440, 12524), (456, 12641), (459, 12674), (460, 12695), (461, 12698), (474, 12764), (475, 12770), (477, 12785), (497, 12905), (499, 12914), (511, 12998), (567, 13319), (602, 13538), (608, 13574), (639, 13787), (673, 13979), (681, 14027), (685, 14048), (699, 14156), (711, 14222), (713, 14240), (719, 14300), (725, 14345), (732, 14375), (733, 14384), (738, 14414), (749, 14480), (753, 14528), (760, 14588), (770, 14675), (779, 14738),

Gene: Soilmate_17 Start: 10172, Stop: 15763, Start Num: 4

Candidate Starts for Soilmate_17:

(Start: 4 @10172 has 38 MA's), (Start: 6 @10187 has 1 MA's), (Start: 9 @10223 has 1 MA's), (10, 10232), (11, 10235), (13, 10277), (33, 10388), (35, 10409), (41, 10529), (56, 10637), (59, 10655), (63, 10676), (64, 10679), (67, 10697), (90, 10811), (98, 10847), (100, 10862), (102, 10871), (124, 11039), (129, 11066), (143, 11183), (173, 11354), (178, 11384), (198, 11588), (206, 11633), (229, 11807), (233, 11834), (236, 11864), (240, 11885), (249, 11951), (250, 11954), (254, 11993), (263, 12056), (274, 12113), (278, 12155), (283, 12200), (285, 12206), (286, 12218), (287, 12221), (293, 12275), (298, 12314), (300, 12335), (301, 12338), (303, 12356), (309, 12383), (314, 12404), (316, 12410), (320, 12431), (324, 12458), (326, 12506), (329, 12536), (353, 12692), (356, 12716), (358, 12725), (360, 12746), (379, 12827), (400, 12923), (401, 12926), (402, 12932), (407, 12974), (408, 12977), (411, 12998), (419, 13058), (420, 13061), (426, 13094), (429, 13124), (442, 13214), (478, 13481), (486, 13529), (489, 13574), (490, 13577), (492, 13592), (501, 13637), (502, 13646), (503, 13655), (510, 13706), (523, 13778), (528, 13796), (536, 13817), (545, 13916), (546, 13919), (553, 13952), (561, 14018), (562, 14036), (564, 14051), (569, 14084), (577, 14135), (586, 14186), (591, 14234), (617, 14429), (618, 14432), (629, 14504), (630, 14507), (638, 14573), (639, 14576), (641, 14594), (649, 14654), (657, 14729), (667, 14813), (670, 14828), (696, 15041), (703, 15098), (706, 15113), (712, 15161), (717, 15206), (740, 15326), (741, 15335), (748, 15374), (757, 15446), (762, 15515), (772, 15578), (774, 15596), (780, 15653), (789, 15746),

Gene: Sopespian_16 Start: 9630, Stop: 14768, Start Num: 23

Candidate Starts for Sopespian_16:

(Start: 17 @9606 has 5 MA's), (Start: 23 @9630 has 36 MA's), (27, 9657), (40, 9786), (43, 9861), (68, 10014), (69, 10017), (87, 10113), (90, 10122), (96, 10152), (98, 10158), (100, 10173), (101, 10176), (105, 10197), (114, 10269), (116, 10290), (126, 10356), (129, 10377), (143, 10494), (170, 10656), (178, 10695), (187, 10770), (201, 10929), (206, 10941), (209, 10968), (214, 11013), (216, 11025), (229, 11115), (231, 11133), (234, 11154), (237, 11184), (243, 11208), (246, 11220), (249, 11259), (253, 11292), (269, 11394), (270, 11397), (274, 11421), (285, 11514), (287, 11529), (291, 11568), (311, 11703), (312, 11706), (320, 11739), (330, 11847), (331, 11850), (336, 11901), (350, 11976), (359, 12066), (361, 12078), (370, 12123), (375, 12144), (376, 12147), (377, 12150), (393, 12225), (401, 12258), (404, 12279), (408, 12309), (415, 12357), (416, 12363), (420, 12390), (440, 12525), (456, 12642), (459, 12675), (460, 12696), (474, 12765), (475, 12771), (477, 12786), (497, 12906), (499, 12915), (511, 12999), (567, 13320), (602, 13539), (608, 13575), (639, 13788), (673, 13980), (681, 14028), (685, 14049), (699, 14157), (711, 14223), (713, 14241), (725, 14346), (732, 14376), (733, 14385), (738, 14415), (749, 14481), (753, 14529), (760, 14589), (770, 14676), (779, 14739),

Gene: Spooky_18 Start: 9874, Stop: 15489, Start Num: 17

Candidate Starts for Spooky_18:

(Start: 17 @9874 has 5 MA's), (Start: 26 @9919 has 1 MA's), (28, 9940), (32, 9961), (36, 10006), (64, 10246), (85, 10339), (86, 10351), (89, 10375), (90, 10378), (102, 10438), (104, 10447), (105, 10453), (114, 10525), (123, 10603), (126, 10612), (129, 10633), (191, 11053), (198, 11161), (201, 11194), (206, 11206), (209, 11233), (229, 11380), (233, 11407), (236, 11437), (243, 11473), (249, 11524), (250, 11527), (251, 11536), (256, 11572), (265, 11638), (274, 11686), (282, 11770), (283, 11773), (285, 11779), (286, 11791), (287, 11794), (292, 11845), (293, 11848), (298, 11887), (316, 11983), (320, 12004), (342, 12208), (349, 12238), (358, 12319), (361, 12343), (362, 12355), (371, 12391), (386, 12451), (393, 12490), (395, 12496), (396, 12499), (400, 12520), (401, 12523), (415, 12622), (421, 12661), (425, 12685), (429, 12718), (432, 12763), (438, 12817), (439, 12829), (446, 12904), (447, 12925), (453, 12961), (457, 12991), (467, 13072), (469, 13081), (473, 13105), (485, 13186), (486, 13192), (489, 13237), (490, 13240), (492, 13255), (501, 13300), (502, 13309), (503, 13318), (521, 13426), (528, 13459), (533, 13474), (536, 13480), (545, 13579), (546, 13582), (547, 13585), (551, 13594), (564, 13711), (569, 13744), (576, 13792), (577, 13795), (584, 13825), (590, 13885), (600, 13966), (605, 13987), (606, 13990), (619, 14083), (620, 14092), (636, 14194), (639, 14215), (643, 14245), (645, 14254), (650, 14293), (651, 14296), (652, 14299), (654, 14326), (659, 14380), (671, 14497), (680, 14581), (682, 14593), (683, 14605), (684, 14611), (688, 14638), (694, 14662), (714, 14839), (723, 14926), (727, 14944), (728, 14953), (743, 15031), (746, 15049), (755, 15139), (759, 15151), (767, 15238), (770, 15280), (775, 15313), (776, 15325), (790, 15469),

Gene: Squiddly_20 Start: 11289, Stop: 16901, Start Num: 17

Candidate Starts for Squiddly_20:

(Start: 17 @11289 has 5 MA's), (21, 11307), (24, 11316), (Start: 26 @11334 has 1 MA's), (28, 11355), (30, 11367), (36, 11421), (Start: 37 @11436 has 1 MA's), (53, 11604), (54, 11613), (59, 11637), (64, 11661), (67, 11679), (77, 11724), (89, 11790), (90, 11793), (102, 11853), (123, 12018), (129, 12048), (145, 12204), (173, 12342), (175, 12357), (191, 12468), (198, 12576), (205, 12618), (206, 12621), (207, 12627), (209, 12648), (210, 12660), (229, 12795), (233, 12822), (236, 12852), (239, 12870), (249, 12939), (251, 12951), (265, 13053), (274, 13101), (278, 13143), (283, 13188), (285, 13194), (286, 13206), (287, 13209), (289, 13230), (292, 13260), (293, 13263), (297, 13299), (298, 13302), (310, 13377), (316, 13398), (320, 13419), (327, 13503), (338, 13593), (358, 13734), (362, 13770), (370, 13803), (371, 13806), (375, 13824), (386, 13866), (393, 13905), (395, 13911), (396, 13914), (400, 13935), (401, 13938), (415, 14037), (421, 14076), (429, 14133), (433, 14208), (439, 14244), (447, 14340), (453, 14376), (457, 14406), (466, 14484), (467, 14487), (469, 14496), (473, 14520), (477, 14544), (480, 14577), (485, 14601), (486, 14607), (487, 14640), (489, 14652), (490, 14655), (492, 14670), (498, 14688), (501, 14715), (502, 14724), (503, 14733), (504, 14736), (521, 14841),

(533, 14889), (536, 14895), (546, 14997), (551, 15009), (564, 15126), (569, 15159), (577, 15210), (579, 15222), (584, 15240), (590, 15300), (600, 15381), (605, 15402), (619, 15498), (621, 15516), (626, 15540), (636, 15609), (639, 15630), (643, 15660), (645, 15669), (650, 15708), (651, 15711), (652, 15714), (654, 15741), (659, 15795), (671, 15912), (680, 15996), (682, 16008), (683, 16020), (684, 16026), (688, 16053), (694, 16077), (714, 16254), (723, 16341), (727, 16359), (728, 16368), (743, 16446), (745, 16461), (747, 16470), (754, 16545), (755, 16554), (759, 16566), (767, 16653), (770, 16695), (775, 16728), (776, 16740), (786, 16815), (790, 16881),

Gene: Starburst_17 Start: 9629, Stop: 14767, Start Num: 23

Candidate Starts for Starburst_17:

(Start: 17 @9605 has 5 MA's), (Start: 23 @9629 has 36 MA's), (27, 9656), (40, 9785), (43, 9860), (68, 10013), (69, 10016), (87, 10112), (90, 10121), (96, 10151), (98, 10157), (100, 10172), (101, 10175), (105, 10196), (114, 10268), (116, 10289), (126, 10355), (129, 10376), (143, 10493), (170, 10655), (178, 10694), (187, 10769), (201, 10928), (206, 10940), (209, 10967), (214, 11012), (216, 11024), (229, 11114), (231, 11132), (234, 11153), (237, 11183), (243, 11207), (246, 11219), (249, 11258), (253, 11291), (269, 11393), (270, 11396), (274, 11420), (275, 11426), (285, 11513), (287, 11528), (291, 11567), (312, 11705), (319, 11735), (320, 11738), (330, 11846), (331, 11849), (336, 11900), (350, 11975), (361, 12077), (370, 12122), (375, 12143), (376, 12146), (377, 12149), (393, 12224), (401, 12257), (404, 12278), (408, 12308), (415, 12356), (416, 12362), (420, 12389), (440, 12524), (456, 12641), (459, 12674), (460, 12695), (474, 12764), (475, 12770), (477, 12785), (497, 12905), (499, 12914), (511, 12998), (567, 13319), (602, 13538), (608, 13574), (639, 13787), (673, 13979), (681, 14027), (685, 14048), (699, 14156), (711, 14222), (713, 14240), (719, 14300), (725, 14345), (732, 14375), (733, 14384), (738, 14414), (749, 14480), (753, 14528), (760, 14588), (770, 14675), (779, 14738),

Gene: SteamedHams_18 Start: 9646, Stop: 14433, Start Num: 74

Candidate Starts for SteamedHams_18:

(Start: 74 @9646 has 16 MA's), (Start: 81 @9673 has 1 MA's), (94, 9751), (106, 9802), (117, 9889), (120, 9904), (128, 9961), (130, 9979), (132, 10006), (134, 10009), (142, 10078), (147, 10135), (157, 10180), (161, 10198), (168, 10243), (176, 10279), (180, 10312), (188, 10360), (189, 10363), (194, 10411), (195, 10450), (197, 10465), (220, 10606), (227, 10657), (230, 10675), (237, 10729), (268, 10906), (273, 10933), (283, 11026), (285, 11032), (287, 11047), (291, 11086), (292, 11098), (301, 11164), (316, 11236), (319, 11254), (320, 11257), (324, 11284), (352, 11530), (361, 11596), (370, 11641), (375, 11662), (376, 11665), (377, 11668), (386, 11704), (393, 11743), (395, 11749), (401, 11776), (419, 11905), (420, 11908), (422, 11926), (441, 12049), (443, 12064), (459, 12193), (460, 12214), (468, 12256), (474, 12283), (475, 12289), (495, 12421), (499, 12433), (511, 12520), (519, 12562), (529, 12598), (552, 12724), (557, 12763), (575, 12892), (585, 12949), (592, 12991), (606, 13084), (613, 13159), (624, 13222), (636, 13303), (639, 13324), (662, 13501), (663, 13507), (689, 13726), (697, 13804), (699, 13822), (701, 13828), (711, 13888), (713, 13906), (716, 13939), (725, 14011), (733, 14050), (738, 14080), (749, 14146), (753, 14194), (760, 14254), (771, 14344), (779, 14404),

Gene: SummitAcademy_15 Start: 9452, Stop: 14545, Start Num: 23

Candidate Starts for SummitAcademy_15:

(Start: 23 @9452 has 36 MA's), (40, 9608), (52, 9737), (55, 9767), (68, 9836), (71, 9848), (80, 9884), (87, 9935), (90, 9944), (98, 9980), (102, 10004), (111, 10064), (118, 10118), (121, 10157), (122, 10163), (126, 10178), (129, 10199), (152, 10370), (164, 10433), (170, 10478), (182, 10559), (198, 10718), (201, 10751), (206, 10763), (209, 10790), (216, 10847), (221, 10877), (223, 10889), (235, 10991), (236, 10994), (249, 11081), (256, 11129), (274, 11243), (285, 11336), (287, 11351), (289, 11372), (293, 11405), (296, 11435), (299, 11447), (303, 11486), (308, 11510), (309, 11513), (315, 11537), (320, 11561), (329, 11666), (342, 11744), (349, 11774), (350, 11777), (352, 11813), (358, 11855), (361, 11879), (363, 11894), (366, 11909), (370, 11924), (376, 11948), (386, 11987), (388, 12002), (389, 12008), (394, 12029), (399, 12053), (401, 12059), (418, 12185), (424, 12215), (430,

12266), (435, 12302), (439, 12323), (440, 12326), (449, 12398), (456, 12443), (459, 12476), (460, 12497), (471, 12551), (482, 12626), (499, 12710), (511, 12797), (567, 13115), (573, 13145), (595, 13283), (604, 13334), (608, 13364), (632, 13529), (636, 13559), (669, 13739), (674, 13790), (681, 13817), (685, 13838), (699, 13934), (707, 13982), (711, 14000), (725, 14123), (731, 14147), (733, 14162), (738, 14192), (742, 14219), (744, 14225), (749, 14258), (756, 14327), (758, 14330), (760, 14366), (771, 14456),

Gene: Survivors_18 Start: 10474, Stop: 15597, Start Num: 23

Candidate Starts for Survivors_18:

(18, 10453), (Start: 23 @10474 has 36 MA's), (27, 10501), (40, 10630), (46, 10726), (53, 10777), (65, 10834), (70, 10867), (71, 10870), (87, 10957), (91, 10969), (100, 11017), (101, 11020), (102, 11026), (109, 11080), (111, 11086), (116, 11134), (126, 11200), (129, 11221), (187, 11614), (188, 11617), (195, 11719), (206, 11785), (207, 11791), (209, 11812), (236, 12016), (239, 12034), (241, 12040), (243, 12052), (246, 12064), (249, 12103), (251, 12115), (256, 12151), (263, 12208), (268, 12232), (269, 12238), (285, 12358), (287, 12373), (291, 12412), (300, 12487), (305, 12520), (309, 12535), (310, 12541), (311, 12547), (320, 12583), (330, 12691), (339, 12763), (349, 12817), (370, 12967), (376, 12991), (389, 13051), (392, 13063), (393, 13069), (399, 13096), (400, 13099), (401, 13102), (414, 13195), (415, 13201), (422, 13252), (431, 13321), (437, 13354), (440, 13369), (441, 13375), (448, 13432), (450, 13444), (455, 13483), (456, 13486), (458, 13507), (459, 13519), (460, 13540), (461, 13543), (468, 13582), (471, 13594), (474, 13609), (497, 13750), (511, 13846), (522, 13912), (532, 13933), (535, 13939), (567, 14176), (573, 14206), (578, 14245), (599, 14380), (606, 14410), (608, 14431), (630, 14569), (636, 14617), (679, 14848), (681, 14854), (699, 14983), (711, 15049), (716, 15100), (725, 15172), (733, 15211), (738, 15241), (744, 15274), (749, 15307), (758, 15379), (763, 15451), (770, 15505), (772, 15511), (779, 15568),

Gene: SweatNTears_18 Start: 10127, Stop: 14926, Start Num: 74

Candidate Starts for SweatNTears_18:

(Start: 74 @10127 has 16 MA's), (Start: 81 @10154 has 1 MA's), (83, 10160), (106, 10283), (120, 10385), (125, 10430), (128, 10442), (130, 10460), (132, 10487), (134, 10490), (135, 10505), (141, 10556), (142, 10559), (147, 10616), (149, 10619), (157, 10661), (161, 10679), (168, 10724), (176, 10760), (180, 10793), (185, 10826), (186, 10838), (194, 10892), (195, 10931), (197, 10946), (199, 10955), (202, 10982), (211, 11033), (221, 11093), (223, 11102), (230, 11156), (240, 11219), (243, 11234), (251, 11297), (268, 11387), (273, 11414), (281, 11495), (283, 11507), (285, 11513), (287, 11528), (290, 11558), (291, 11567), (301, 11645), (306, 11678), (316, 11717), (319, 11735), (320, 11738), (324, 11765), (327, 11822), (329, 11843), (345, 11954), (350, 11975), (352, 12011), (358, 12053), (359, 12065), (361, 12077), (370, 12122), (371, 12125), (375, 12143), (376, 12146), (377, 12149), (393, 12224), (401, 12257), (409, 12317), (418, 12383), (419, 12386), (420, 12389), (422, 12407), (436, 12506), (439, 12521), (440, 12524), (459, 12674), (460, 12695), (468, 12737), (474, 12764), (475, 12770), (495, 12902), (499, 12914), (511, 13001), (519, 13043), (529, 13079), (543, 13154), (552, 13205), (557, 13244), (559, 13268), (575, 13373), (585, 13430), (606, 13568), (613, 13643), (636, 13787), (639, 13808), (662, 13985), (663, 13991), (699, 14315), (701, 14321), (711, 14381), (713, 14399), (716, 14432), (725, 14504), (733, 14543), (738, 14573), (749, 14639), (753, 14687), (760, 14747), (771, 14837), (779, 14897),

Gene: Tarnish_16 Start: 9751, Stop: 14835, Start Num: 23

Candidate Starts for Tarnish_16:

(Start: 23 @9751 has 36 MA's), (40, 9907), (52, 10036), (55, 10066), (68, 10135), (71, 10147), (80, 10183), (87, 10234), (90, 10243), (98, 10279), (102, 10303), (111, 10363), (118, 10417), (121, 10456), (126, 10477), (129, 10498), (148, 10657), (152, 10669), (164, 10732), (170, 10777), (182, 10858), (198, 11017), (201, 11050), (206, 11062), (209, 11089), (216, 11146), (221, 11176), (223, 11188), (235, 11290), (236, 11293), (249, 11380), (256, 11428), (274, 11542), (285, 11635), (287, 11650), (289, 11671), (293, 11704), (296, 11734), (299, 11746), (303, 11785), (308, 11809), (309, 11812), (315, 11836), (320, 11860), (329, 11965), (338, 12013), (342, 12043), (346, 12058), (349, 12073),

(352, 12112), (358, 12154), (361, 12178), (366, 12208), (370, 12223), (376, 12247), (386, 12286), (388, 12301), (389, 12307), (394, 12328), (399, 12352), (401, 12358), (418, 12484), (424, 12514), (429, 12553), (435, 12601), (439, 12622), (440, 12625), (449, 12697), (456, 12742), (459, 12775), (460, 12796), (471, 12850), (482, 12925), (499, 13009), (511, 13096), (550, 13282), (567, 13414), (573, 13444), (595, 13582), (604, 13633), (608, 13663), (623, 13768), (632, 13819), (636, 13849), (669, 14029), (674, 14080), (681, 14107), (685, 14128), (699, 14224), (707, 14272), (711, 14290), (725, 14413), (731, 14437), (733, 14452), (738, 14482), (742, 14509), (744, 14515), (749, 14548), (756, 14617), (758, 14620), (760, 14656), (771, 14746),

Gene: TaronosaurusRx_17 Start: 10940, Stop: 16063, Start Num: 20

Candidate Starts for TaronosaurusRx_17:

(Start: 20 @10940 has 13 MA's), (22, 10946), (49, 11219), (51, 11228), (57, 11267), (67, 11324), (84, 11387), (99, 11480), (102, 11498), (121, 11651), (129, 11693), (140, 11780), (170, 11972), (171, 11975), (178, 12011), (183, 12059), (198, 12212), (201, 12245), (205, 12254), (207, 12263), (210, 12296), (212, 12308), (215, 12332), (222, 12377), (224, 12386), (229, 12431), (233, 12458), (234, 12470), (236, 12488), (258, 12647), (262, 12671), (263, 12680), (264, 12683), (283, 12824), (284, 12827), (285, 12830), (286, 12842), (287, 12845), (293, 12899), (298, 12938), (316, 13034), (320, 13055), (322, 13070), (324, 13082), (328, 13154), (353, 13316), (382, 13373), (390, 13385), (391, 13388), (401, 13421), (414, 13514), (415, 13520), (416, 13526), (418, 13547), (419, 13550), (420, 13553), (423, 13574), (427, 13604), (433, 13652), (434, 13658), (436, 13667), (441, 13691), (443, 13706), (444, 13709), (445, 13715), (450, 13760), (452, 13769), (463, 13868), (470, 13910), (476, 13943), (483, 13988), (486, 14012), (491, 14057), (496, 14075), (519, 14213), (525, 14234), (530, 14252), (531, 14255), (534, 14264), (566, 14495), (568, 14513), (574, 14537), (595, 14681), (598, 14705), (607, 14756), (630, 14900), (633, 14918), (637, 14957), (642, 14996), (644, 15002), (646, 15011), (652, 15053), (658, 15131), (664, 15170), (678, 15305), (694, 15398), (695, 15401), (698, 15458), (702, 15467), (704, 15479), (708, 15500), (740, 15713), (747, 15752), (758, 15821), (761, 15875), (782, 16025),

Gene: Toast_17 Start: 10235, Stop: 15886, Start Num: 3

Candidate Starts for Toast_17:

(Start: 3 @10235 has 1 MA's), (Start: 4 @10271 has 38 MA's), (Start: 7 @10292 has 1 MA's), (10, 10331), (13, 10376), (29, 10466), (31, 10475), (33, 10487), (35, 10508), (39, 10565), (42, 10637), (44, 10658), (51, 10700), (52, 10703), (54, 10730), (58, 10751), (59, 10754), (63, 10775), (67, 10796), (79, 10847), (80, 10850), (90, 10910), (119, 11093), (129, 11165), (155, 11351), (173, 11453), (175, 11468), (178, 11483), (184, 11540), (206, 11732), (222, 11852), (233, 11933), (236, 11963), (243, 11999), (249, 12050), (269, 12185), (270, 12188), (274, 12212), (280, 12263), (283, 12299), (285, 12305), (287, 12320), (293, 12374), (298, 12413), (301, 12437), (303, 12455), (314, 12503), (316, 12509), (319, 12527), (320, 12530), (322, 12545), (324, 12557), (326, 12605), (349, 12743), (358, 12824), (361, 12848), (362, 12860), (363, 12863), (371, 12896), (394, 12998), (399, 13025), (400, 13028), (401, 13031), (402, 13037), (408, 13082), (410, 13094), (412, 13106), (415, 13130), (417, 13145), (419, 13160), (420, 13163), (424, 13187), (427, 13214), (439, 13295), (451, 13379), (463, 13484), (469, 13517), (478, 13583), (479, 13592), (486, 13631), (487, 13664), (489, 13676), (490, 13679), (492, 13694), (493, 13703), (501, 13739), (502, 13748), (503, 13757), (533, 13913), (534, 13916), (536, 13919), (537, 13940), (546, 14021), (554, 14063), (564, 14150), (569, 14183), (570, 14192), (577, 14234), (594, 14348), (615, 14513), (629, 14597), (630, 14600), (634, 14630), (635, 14633), (638, 14666), (639, 14669), (649, 14747), (656, 14804), (670, 14921), (675, 14972), (690, 15074), (696, 15107), (700, 15173), (710, 15239), (711, 15245), (713, 15263), (716, 15296), (725, 15368), (735, 15410), (736, 15416), (738, 15434), (739, 15440), (742, 15461), (749, 15500), (762, 15641), (772, 15704), (780, 15779), (789, 15872),

Gene: Tolls_18 Start: 9649, Stop: 14436, Start Num: 74

Candidate Starts for Tolls_18:

(Start: 74 @9649 has 16 MA's), (Start: 81 @9676 has 1 MA's), (94, 9754), (106, 9805), (117, 9892), (120, 9907), (128, 9964), (130, 9982), (132, 10009), (134, 10012), (142, 10081), (147, 10138), (157, 10183), (161, 10201), (168, 10246), (172, 10261), (176, 10282), (180, 10315), (188, 10363), (189, 10366), (194, 10414), (195, 10453), (197, 10468), (227, 10660), (230, 10678), (244, 10762), (268, 10909), (273, 10936), (283, 11029), (285, 11035), (287, 11050), (291, 11089), (292, 11101), (301, 11167), (316, 11239), (319, 11257), (320, 11260), (324, 11287), (352, 11533), (361, 11599), (370, 11644), (375, 11665), (376, 11668), (377, 11671), (386, 11707), (393, 11746), (395, 11752), (401, 11779), (419, 11908), (420, 11911), (422, 11929), (441, 12052), (443, 12067), (459, 12196), (460, 12217), (468, 12259), (474, 12286), (475, 12292), (495, 12424), (499, 12436), (511, 12523), (519, 12565), (529, 12601), (552, 12727), (557, 12766), (575, 12895), (585, 12952), (592, 12994), (606, 13087), (613, 13162), (624, 13225), (636, 13306), (639, 13327), (662, 13504), (663, 13510), (689, 13729), (697, 13807), (699, 13825), (701, 13831), (711, 13891), (713, 13909), (716, 13942), (725, 14014), (733, 14053), (738, 14083), (749, 14149), (753, 14197), (760, 14257), (771, 14347), (779, 14407),

Gene: Troje_16 Start: 9601, Stop: 14397, Start Num: 74

Candidate Starts for Troje_16:

(Start: 74 @9601 has 16 MA's), (Start: 81 @9628 has 1 MA's), (83, 9634), (106, 9757), (120, 9859), (125, 9904), (128, 9916), (130, 9934), (132, 9961), (134, 9964), (135, 9979), (141, 10030), (142, 10033), (147, 10090), (149, 10093), (157, 10135), (161, 10153), (168, 10198), (176, 10234), (180, 10267), (185, 10300), (186, 10312), (194, 10366), (195, 10405), (197, 10420), (199, 10429), (202, 10456), (211, 10507), (221, 10567), (223, 10576), (230, 10630), (240, 10693), (243, 10708), (268, 10861), (273, 10888), (281, 10969), (283, 10981), (285, 10987), (287, 11002), (291, 11041), (301, 11119), (306, 11152), (316, 11191), (319, 11209), (320, 11212), (324, 11239), (327, 11296), (329, 11317), (337, 11380), (345, 11428), (350, 11449), (352, 11485), (358, 11527), (361, 11551), (370, 11596), (371, 11599), (375, 11617), (376, 11620), (377, 11623), (393, 11698), (395, 11704), (401, 11731), (409, 11791), (418, 11857), (419, 11860), (420, 11863), (422, 11881), (436, 11980), (439, 11995), (440, 11998), (459, 12148), (460, 12169), (468, 12211), (474, 12238), (475, 12244), (499, 12388), (511, 12475), (519, 12517), (529, 12553), (543, 12628), (552, 12679), (557, 12718), (565, 12796), (575, 12847), (585, 12904), (606, 13042), (613, 13114), (636, 13258), (639, 13279), (662, 13456), (663, 13462), (699, 13786), (701, 13792), (711, 13852), (713, 13870), (716, 13903), (725, 13975), (733, 14014), (738, 14044), (749, 14110), (750, 14128), (753, 14158), (760, 14218), (771, 14308), (779, 14368),

Gene: Typhonomachy_16 Start: 9629, Stop: 14767, Start Num: 23

Candidate Starts for Typhonomachy_16:

(Start: 17 @9605 has 5 MA's), (Start: 23 @9629 has 36 MA's), (27, 9656), (40, 9785), (43, 9860), (68, 10013), (69, 10016), (87, 10112), (90, 10121), (96, 10151), (98, 10157), (100, 10172), (101, 10175), (105, 10196), (114, 10268), (116, 10289), (126, 10355), (129, 10376), (143, 10493), (170, 10655), (178, 10694), (187, 10769), (201, 10928), (206, 10940), (209, 10967), (214, 11012), (216, 11024), (229, 11114), (231, 11132), (234, 11153), (237, 11183), (243, 11207), (246, 11219), (249, 11258), (253, 11291), (255, 11303), (269, 11393), (270, 11396), (274, 11420), (285, 11513), (287, 11528), (291, 11567), (298, 11621), (303, 11663), (312, 11705), (319, 11735), (320, 11738), (330, 11846), (331, 11849), (336, 11900), (350, 11975), (359, 12065), (361, 12077), (368, 12116), (370, 12122), (375, 12143), (376, 12146), (377, 12149), (393, 12224), (401, 12257), (404, 12278), (408, 12308), (415, 12356), (416, 12362), (420, 12389), (440, 12524), (456, 12641), (459, 12674), (460, 12695), (474, 12764), (475, 12770), (477, 12785), (497, 12905), (499, 12914), (511, 12998), (567, 13319), (602, 13538), (608, 13574), (639, 13787), (673, 13979), (681, 14027), (685, 14048), (699, 14156), (711, 14222), (713, 14240), (725, 14345), (732, 14375), (733, 14384), (738, 14414), (749, 14480), (753, 14528), (760, 14588), (770, 14675), (779, 14738),

Gene: UmaThurman_17 Start: 10381, Stop: 15924, Start Num: 4

Candidate Starts for UmaThurman_17:

(Start: 4 @10381 has 38 MA's), (Start: 6 @10396 has 1 MA's), (Start: 7 @10402 has 1 MA's), (Start: 9 @10432 has 1 MA's), (10, 10441), (11, 10444), (13, 10486), (33, 10597), (35, 10618), (56, 10846), (59, 10864), (62, 10879), (63, 10885), (64, 10888), (67, 10906), (73, 10930), (88, 11014), (89, 11017), (98, 11056), (100, 11071), (102, 11080), (124, 11248), (129, 11275), (178, 11593), (198, 11797), (206, 11842), (207, 11848), (209, 11869), (210, 11881), (224, 11971), (229, 12016), (233, 12043), (236, 12073), (249, 12160), (250, 12163), (254, 12202), (274, 12322), (278, 12364), (283, 12409), (285, 12415), (287, 12430), (293, 12484), (298, 12523), (300, 12544), (301, 12547), (303, 12565), (304, 12574), (314, 12613), (316, 12619), (320, 12640), (324, 12667), (349, 12874), (365, 12940), (378, 12979), (385, 12994), (400, 13024), (401, 13027), (408, 13078), (419, 13159), (420, 13162), (426, 13195), (429, 13225), (431, 13249), (478, 13582), (486, 13630), (489, 13675), (490, 13678), (492, 13693), (501, 13738), (502, 13747), (503, 13756), (510, 13807), (523, 13879), (528, 13897), (536, 13918), (545, 14017), (546, 14020), (553, 14053), (561, 14119), (562, 14137), (564, 14152), (569, 14185), (577, 14236), (586, 14287), (591, 14335), (617, 14530), (618, 14533), (629, 14605), (630, 14608), (638, 14674), (639, 14677), (641, 14695), (649, 14755), (656, 14812), (657, 14830), (666, 14911), (667, 14914), (670, 14929), (686, 15088), (696, 15142), (700, 15208), (709, 15262), (710, 15274), (711, 15280), (725, 15403), (731, 15427), (735, 15445), (738, 15469), (739, 15475), (742, 15496), (749, 15535), (762, 15676), (765, 15688), (772, 15739), (774, 15757), (789, 15907),

Gene: Utz_17 Start: 10248, Stop: 15791, Start Num: 4

Candidate Starts for Utz_17:

(Start: 4 @10248 has 38 MA's), (Start: 6 @10263 has 1 MA's), (Start: 7 @10269 has 1 MA's), (Start: 9 @10299 has 1 MA's), (10, 10308), (11, 10311), (13, 10353), (33, 10464), (35, 10485), (41, 10605), (46, 10647), (56, 10713), (59, 10731), (63, 10752), (64, 10755), (67, 10773), (73, 10797), (88, 10881), (89, 10884), (98, 10923), (100, 10938), (102, 10947), (124, 11115), (129, 11142), (143, 11259), (173, 11430), (178, 11460), (198, 11664), (206, 11709), (209, 11736), (210, 11748), (224, 11838), (233, 11910), (236, 11940), (249, 12027), (250, 12030), (254, 12069), (274, 12189), (278, 12231), (283, 12276), (285, 12282), (286, 12294), (287, 12297), (293, 12351), (298, 12390), (300, 12411), (301, 12414), (303, 12432), (314, 12480), (316, 12486), (320, 12507), (324, 12534), (365, 12807), (378, 12846), (385, 12861), (400, 12891), (401, 12894), (408, 12945), (419, 13026), (420, 13029), (426, 13062), (429, 13092), (431, 13116), (442, 13182), (478, 13449), (481, 13467), (486, 13497), (489, 13542), (490, 13545), (492, 13560), (493, 13569), (501, 13605), (502, 13614), (503, 13623), (510, 13674), (523, 13746), (528, 13764), (536, 13785), (545, 13884), (546, 13887), (553, 13920), (561, 13986), (562, 14004), (564, 14019), (569, 14052), (577, 14103), (586, 14154), (617, 14397), (618, 14400), (629, 14472), (630, 14475), (638, 14541), (639, 14544), (641, 14562), (649, 14622), (656, 14679), (657, 14697), (666, 14778), (667, 14781), (670, 14796), (696, 15009), (700, 15075), (710, 15141), (711, 15147), (725, 15270), (731, 15294), (735, 15312), (738, 15336), (739, 15342), (742, 15363), (749, 15402), (762, 15543), (772, 15606), (774, 15624), (777, 15651), (780, 15681), (789, 15774),

Gene: Vine_17 Start: 10381, Stop: 15480, Start Num: 23

Candidate Starts for Vine_17:

(Start: 23 @10381 has 36 MA's), (40, 10537), (52, 10666), (55, 10696), (68, 10765), (71, 10777), (80, 10813), (84, 10822), (87, 10864), (90, 10873), (98, 10909), (102, 10933), (111, 10993), (118, 11047), (121, 11086), (126, 11107), (129, 11128), (148, 11287), (152, 11299), (164, 11362), (170, 11407), (182, 11488), (198, 11647), (201, 11680), (206, 11692), (209, 11719), (216, 11776), (221, 11806), (223, 11818), (235, 11920), (236, 11923), (249, 12010), (255, 12055), (256, 12058), (274, 12172), (285, 12265), (287, 12280), (289, 12301), (293, 12334), (296, 12364), (299, 12376), (303, 12415), (308, 12439), (309, 12442), (315, 12466), (320, 12490), (329, 12595), (342, 12673), (349, 12703), (350, 12706), (352, 12742), (358, 12784), (361, 12808), (363, 12823), (366, 12838), (370, 12853), (376, 12877), (386, 12916), (388, 12931), (389, 12937), (394, 12958), (399, 12982), (401, 12988), (418, 13114), (424, 13144), (430, 13195), (435, 13231), (439, 13252), (440, 13255), (449, 13327), (456, 13372), (459, 13405), (460, 13426), (471, 13480), (482, 13555), (499, 13639), (511, 13726), (550, 13912), (567, 14044), (573, 14074), (595, 14212), (604, 14263), (608, 14293), (623, 14398),

(632, 14449), (636, 14479), (669, 14659), (674, 14710), (681, 14752), (685, 14773), (699, 14869), (707, 14917), (711, 14935), (725, 15058), (731, 15082), (733, 15097), (738, 15127), (742, 15154), (744, 15160), (749, 15193), (756, 15262), (758, 15265), (760, 15301), (771, 15391),

Gene: Wallaby_20 Start: 10618, Stop: 15741, Start Num: 23

Candidate Starts for Wallaby_20:

(18, 10597), (Start: 23 @10618 has 36 MA's), (27, 10645), (40, 10774), (46, 10870), (53, 10921), (65, 10978), (70, 11011), (71, 11014), (87, 11101), (91, 11113), (100, 11161), (101, 11164), (102, 11170), (109, 11224), (111, 11230), (116, 11278), (126, 11344), (129, 11365), (187, 11758), (188, 11761), (195, 11863), (206, 11929), (207, 11935), (209, 11956), (236, 12160), (239, 12178), (241, 12184), (243, 12196), (246, 12208), (249, 12247), (251, 12259), (256, 12295), (263, 12352), (268, 12376), (285, 12502), (287, 12517), (291, 12556), (300, 12631), (305, 12664), (309, 12679), (310, 12685), (311, 12691), (320, 12727), (330, 12835), (339, 12907), (349, 12961), (370, 13111), (376, 13135), (389, 13195), (392, 13207), (393, 13213), (399, 13240), (400, 13243), (401, 13246), (414, 13339), (415, 13345), (422, 13396), (431, 13465), (437, 13498), (440, 13513), (441, 13519), (448, 13576), (450, 13588), (455, 13627), (456, 13630), (458, 13651), (459, 13663), (460, 13684), (461, 13687), (468, 13726), (471, 13738), (474, 13753), (497, 13894), (511, 13990), (522, 14056), (532, 14077), (535, 14083), (567, 14320), (573, 14350), (606, 14554), (608, 14575), (630, 14713), (636, 14761), (679, 14992), (681, 14998), (699, 15127), (711, 15193), (716, 15244), (725, 15316), (733, 15355), (738, 15385), (744, 15418), (749, 15451), (758, 15523), (763, 15595), (770, 15649), (772, 15655), (779, 15712),

Gene: Walrus_18 Start: 10497, Stop: 16019, Start Num: 7

Candidate Starts for Walrus_18:

(Start: 4 @10476 has 38 MA's), (Start: 6 @10491 has 1 MA's), (Start: 7 @10497 has 1 MA's), (Start: 9 @10527 has 1 MA's), (10, 10536), (11, 10539), (13, 10581), (33, 10692), (35, 10713), (41, 10833), (56, 10941), (59, 10959), (64, 10983), (67, 11001), (73, 11025), (88, 11109), (90, 11115), (98, 11151), (100, 11166), (102, 11175), (105, 11190), (111, 11235), (113, 11256), (124, 11343), (129, 11370), (132, 11403), (143, 11487), (152, 11541), (160, 11583), (173, 11658), (178, 11688), (198, 11892), (206, 11937), (229, 12111), (233, 12138), (236, 12168), (249, 12255), (250, 12258), (254, 12297), (256, 12303), (263, 12360), (274, 12417), (278, 12459), (283, 12504), (285, 12510), (287, 12525), (293, 12579), (298, 12618), (300, 12639), (301, 12642), (303, 12660), (309, 12687), (314, 12708), (316, 12714), (320, 12735), (328, 12834), (365, 13035), (369, 13050), (378, 13074), (385, 13089), (400, 13119), (401, 13122), (408, 13173), (419, 13254), (420, 13257), (426, 13290), (429, 13320), (431, 13344), (442, 13410), (478, 13677), (486, 13725), (489, 13770), (490, 13773), (492, 13788), (498, 13806), (501, 13833), (502, 13842), (503, 13851), (510, 13902), (523, 13974), (528, 13992), (536, 14013), (545, 14112), (546, 14115), (553, 14148), (561, 14214), (562, 14232), (564, 14247), (569, 14280), (577, 14331), (586, 14382), (617, 14625), (618, 14628), (629, 14700), (630, 14703), (638, 14769), (639, 14772), (641, 14790), (649, 14850), (656, 14907), (657, 14925), (666, 15006), (667, 15009), (670, 15024), (686, 15183), (696, 15237), (700, 15303), (701, 15309), (710, 15369), (711, 15375), (725, 15498), (731, 15522), (735, 15540), (738, 15564), (739, 15570), (742, 15591), (749, 15630), (762, 15771), (765, 15783), (772, 15834), (774, 15852), (788, 15981), (789, 16002),

Gene: Whitney_19 Start: 10672, Stop: 16305, Start Num: 17

Candidate Starts for Whitney_19:

(Start: 17 @10672 has 5 MA's), (Start: 26 @10717 has 1 MA's), (28, 10738), (32, 10759), (36, 10804), (Start: 37 @10819 has 1 MA's), (42, 10903), (48, 10945), (49, 10957), (59, 11020), (62, 11035), (64, 11044), (67, 11062), (68, 11068), (80, 11116), (105, 11251), (123, 11401), (129, 11431), (160, 11650), (173, 11725), (178, 11755), (198, 11959), (206, 12004), (207, 12010), (209, 12031), (212, 12055), (220, 12112), (229, 12178), (233, 12205), (234, 12217), (236, 12235), (237, 12247), (243, 12271), (246, 12283), (249, 12322), (250, 12325), (251, 12334), (254, 12364), (260, 12409), (271, 12469), (274, 12484), (277, 12514), (278, 12526), (283, 12571), (285, 12577), (287, 12592), (290, 12622), (292, 12643), (293, 12646), (301, 12709), (304, 12736), (305, 12739), (306, 12742), (307, 12748),

(313, 12772), (314, 12775), (316, 12781), (318, 12787), (320, 12802), (323, 12820), (325, 12865), (334, 12949), (335, 12955), (339, 12982), (352, 13075), (353, 13084), (361, 13141), (362, 13153), (371, 13189), (372, 13195), (384, 13237), (386, 13249), (393, 13288), (395, 13294), (396, 13297), (399, 13315), (400, 13318), (401, 13321), (405, 13345), (415, 13420), (421, 13459), (425, 13483), (429, 13516), (439, 13627), (442, 13660), (447, 13723), (453, 13759), (457, 13789), (466, 13867), (467, 13870), (469, 13879), (473, 13903), (486, 13990), (489, 14035), (490, 14038), (492, 14053), (501, 14098), (502, 14107), (503, 14116), (504, 14119), (521, 14224), (533, 14272), (536, 14278), (545, 14377), (546, 14380), (551, 14392), (564, 14509), (569, 14542), (577, 14593), (584, 14623), (590, 14683), (600, 14764), (605, 14785), (606, 14788), (609, 14818), (619, 14881), (620, 14890), (621, 14899), (639, 15013), (643, 15043), (650, 15091), (651, 15094), (654, 15124), (655, 15145), (677, 15343), (683, 15406), (684, 15412), (694, 15463), (714, 15655), (723, 15742), (728, 15769), (729, 15772), (743, 15847), (747, 15871), (752, 15910), (754, 15946), (759, 15967), (767, 16054), (770, 16096), (775, 16129), (776, 16141), (790, 16285),

Gene: William_17 Start: 10217, Stop: 15835, Start Num: 4

Candidate Starts for William_17:

(Start: 3 @10181 has 1 MA's), (Start: 4 @10217 has 38 MA's), (Start: 7 @10238 has 1 MA's), (11, 10280), (13, 10322), (29, 10412), (31, 10421), (33, 10433), (35, 10454), (40, 10520), (42, 10583), (44, 10604), (51, 10646), (52, 10649), (54, 10676), (58, 10697), (59, 10700), (63, 10721), (67, 10742), (79, 10793), (80, 10796), (90, 10856), (119, 11039), (129, 11111), (155, 11297), (173, 11399), (175, 11414), (178, 11429), (184, 11486), (206, 11678), (222, 11798), (233, 11879), (236, 11909), (243, 11945), (249, 11996), (269, 12131), (270, 12134), (274, 12158), (280, 12209), (283, 12245), (285, 12251), (287, 12266), (293, 12320), (298, 12359), (301, 12383), (303, 12401), (314, 12449), (316, 12455), (319, 12473), (320, 12476), (322, 12491), (324, 12503), (326, 12551), (349, 12689), (358, 12770), (361, 12794), (362, 12806), (363, 12809), (371, 12842), (394, 12944), (399, 12971), (400, 12974), (401, 12977), (402, 12983), (410, 13040), (412, 13052), (415, 13076), (417, 13091), (419, 13106), (420, 13109), (424, 13133), (427, 13160), (439, 13241), (451, 13325), (463, 13430), (469, 13463), (478, 13529), (479, 13538), (486, 13577), (487, 13610), (489, 13622), (490, 13625), (492, 13640), (493, 13649), (501, 13685), (502, 13694), (503, 13703), (533, 13859), (534, 13862), (536, 13865), (537, 13886), (546, 13967), (554, 14009), (564, 14096), (569, 14129), (570, 14138), (577, 14180), (594, 14294), (629, 14543), (630, 14546), (634, 14576), (635, 14579), (637, 14603), (638, 14612), (639, 14615), (649, 14693), (656, 14750), (670, 14867), (675, 14918), (696, 15056), (700, 15122), (710, 15188), (711, 15194), (713, 15212), (723, 15305), (725, 15317), (736, 15365), (738, 15383), (739, 15389), (742, 15410), (749, 15449), (762, 15590), (772, 15653), (780, 15728), (789, 15821),

Gene: Wisp_16 Start: 10065, Stop: 15509, Start Num: 9

Candidate Starts for Wisp_16:

(Start: 4 @10014 has 38 MA's), (Start: 6 @10029 has 1 MA's), (Start: 7 @10035 has 1 MA's), (Start: 9 @10065 has 1 MA's), (10, 10074), (11, 10077), (13, 10119), (33, 10230), (35, 10251), (41, 10371), (46, 10413), (52, 10446), (56, 10479), (59, 10497), (62, 10512), (63, 10518), (64, 10521), (67, 10539), (73, 10563), (88, 10647), (98, 10689), (100, 10704), (102, 10713), (124, 10881), (129, 10908), (143, 11025), (173, 11196), (178, 11226), (198, 11430), (206, 11475), (209, 11502), (210, 11514), (224, 11604), (229, 11649), (233, 11676), (236, 11706), (249, 11793), (250, 11796), (254, 11835), (263, 11898), (274, 11955), (278, 11997), (283, 12042), (285, 12048), (286, 12060), (287, 12063), (293, 12117), (298, 12156), (300, 12177), (301, 12180), (303, 12198), (309, 12225), (314, 12246), (316, 12252), (319, 12270), (320, 12273), (321, 12279), (324, 12300), (365, 12573), (373, 12600), (378, 12612), (385, 12627), (400, 12657), (401, 12660), (419, 12792), (420, 12795), (426, 12828), (429, 12858), (431, 12882), (442, 12948), (478, 13215), (486, 13263), (489, 13308), (490, 13311), (492, 13326), (501, 13371), (502, 13380), (503, 13389), (510, 13440), (523, 13512), (528, 13530), (536, 13551), (545, 13650), (546, 13653), (553, 13686), (561, 13752), (562, 13770), (564, 13785), (569, 13818), (577, 13869), (586, 13920), (617, 14163), (618, 14166), (629, 14238), (630, 14241), (638, 14307), (639, 14310), (641, 14328), (649, 14388), (666, 14544), (667, 14547), (670, 14562), (686,

14733), (696, 14787), (703, 14844), (706, 14859), (712, 14907), (717, 14952), (740, 15072), (741, 15081), (748, 15120), (757, 15192), (762, 15261), (765, 15273), (772, 15324), (774, 15342), (780, 15399), (789, 15492),

Gene: Wocket_18 Start: 10497, Stop: 15983, Start Num: 4

Candidate Starts for Wocket_18:

(Start: 4 @10497 has 38 MA's), (Start: 6 @10512 has 1 MA's), (Start: 9 @10548 has 1 MA's), (10, 10557), (11, 10560), (13, 10602), (33, 10713), (35, 10734), (41, 10854), (56, 10962), (59, 10980), (63, 11001), (64, 11004), (67, 11022), (73, 11046), (80, 11076), (88, 11130), (90, 11136), (98, 11172), (100, 11187), (102, 11196), (124, 11364), (129, 11391), (152, 11562), (160, 11604), (173, 11679), (178, 11709), (198, 11913), (206, 11958), (207, 11964), (209, 11985), (210, 11997), (224, 12087), (229, 12132), (233, 12159), (236, 12189), (249, 12276), (254, 12318), (265, 12390), (274, 12438), (278, 12480), (283, 12525), (285, 12531), (287, 12546), (293, 12600), (298, 12639), (300, 12660), (301, 12663), (303, 12681), (309, 12708), (314, 12729), (316, 12735), (320, 12756), (324, 12783), (378, 13095), (385, 13110), (400, 13140), (401, 13143), (408, 13194), (419, 13275), (420, 13278), (426, 13311), (429, 13341), (431, 13365), (442, 13431), (478, 13698), (485, 13740), (486, 13746), (487, 13779), (489, 13791), (490, 13794), (492, 13809), (498, 13827), (501, 13854), (502, 13863), (503, 13872), (521, 13980), (533, 14028), (534, 14031), (536, 14034), (537, 14055), (546, 14136), (547, 14139), (564, 14265), (569, 14298), (576, 14346), (577, 14349), (580, 14364), (586, 14400), (618, 14646), (629, 14718), (630, 14721), (638, 14787), (639, 14790), (641, 14808), (649, 14868), (666, 15024), (670, 15042), (686, 15207), (696, 15261), (703, 15318), (706, 15333), (712, 15381), (717, 15426), (740, 15546), (741, 15555), (748, 15594), (757, 15666), (762, 15735), (772, 15798), (774, 15816), (778, 15846),

Gene: Wolfwood_18 Start: 10618, Stop: 15741, Start Num: 23

Candidate Starts for Wolfwood_18:

(18, 10597), (Start: 23 @10618 has 36 MA's), (27, 10645), (40, 10774), (46, 10870), (53, 10921), (65, 10978), (70, 11011), (71, 11014), (87, 11101), (91, 11113), (100, 11161), (101, 11164), (102, 11170), (103, 11173), (109, 11224), (111, 11230), (116, 11278), (126, 11344), (129, 11365), (187, 11758), (188, 11761), (195, 11863), (203, 11920), (205, 11926), (206, 11929), (207, 11935), (209, 11956), (224, 12058), (226, 12085), (236, 12160), (239, 12178), (243, 12196), (246, 12208), (249, 12247), (256, 12295), (263, 12352), (268, 12376), (269, 12382), (285, 12502), (287, 12517), (291, 12556), (300, 12631), (305, 12664), (309, 12679), (310, 12685), (311, 12691), (320, 12727), (330, 12835), (339, 12907), (349, 12961), (361, 13066), (370, 13111), (376, 13135), (389, 13195), (392, 13207), (393, 13213), (399, 13240), (400, 13243), (401, 13246), (414, 13339), (415, 13345), (422, 13396), (431, 13465), (437, 13498), (440, 13513), (441, 13519), (448, 13576), (450, 13588), (455, 13627), (456, 13630), (458, 13651), (459, 13663), (460, 13684), (461, 13687), (468, 13726), (471, 13738), (474, 13753), (497, 13894), (511, 13990), (522, 14056), (532, 14077), (535, 14083), (567, 14320), (573, 14350), (599, 14524), (606, 14554), (608, 14575), (630, 14713), (636, 14761), (679, 14992), (681, 14998), (699, 15127), (711, 15193), (716, 15244), (725, 15316), (733, 15355), (738, 15385), (744, 15418), (749, 15451), (763, 15595), (770, 15649), (772, 15655), (779, 15712),

Gene: Yarn_15 Start: 9639, Stop: 14426, Start Num: 74

Candidate Starts for Yarn_15:

(Start: 74 @9639 has 16 MA's), (Start: 81 @9666 has 1 MA's), (94, 9744), (106, 9795), (117, 9882), (120, 9897), (128, 9954), (130, 9972), (132, 9999), (134, 10002), (142, 10071), (147, 10128), (157, 10173), (161, 10191), (168, 10236), (176, 10272), (180, 10305), (188, 10353), (189, 10356), (194, 10404), (195, 10443), (197, 10458), (227, 10650), (230, 10668), (244, 10752), (268, 10899), (273, 10926), (283, 11019), (285, 11025), (287, 11040), (291, 11079), (292, 11091), (301, 11157), (316, 11229), (319, 11247), (320, 11250), (324, 11277), (352, 11523), (361, 11589), (370, 11634), (375, 11655), (376, 11658), (377, 11661), (386, 11697), (393, 11736), (395, 11742), (401, 11769), (419, 11898), (420, 11901), (422, 11919), (441, 12042), (443, 12057), (459, 12186), (460, 12207), (468, 12249), (474, 12276), (475, 12282), (495, 12414), (499, 12426), (511, 12513), (519, 12555), (529,

12591), (552, 12717), (557, 12756), (575, 12885), (585, 12942), (592, 12984), (606, 13077), (613, 13152), (624, 13215), (636, 13296), (639, 13317), (662, 13494), (663, 13500), (689, 13719), (697, 13797), (699, 13815), (701, 13821), (711, 13881), (713, 13899), (716, 13932), (725, 14004), (733, 14043), (738, 14073), (749, 14139), (753, 14187), (760, 14247), (771, 14337), (779, 14397),

Gene: Yucky_16 Start: 10241, Stop: 15340, Start Num: 23

Candidate Starts for Yucky_16:

(Start: 23 @10241 has 36 MA's), (40, 10397), (55, 10556), (68, 10625), (80, 10673), (87, 10724), (90, 10733), (98, 10769), (102, 10793), (111, 10853), (118, 10907), (121, 10946), (122, 10952), (126, 10967), (129, 10988), (148, 11147), (152, 11159), (164, 11222), (170, 11267), (182, 11348), (198, 11507), (201, 11540), (206, 11552), (209, 11579), (216, 11636), (221, 11666), (223, 11678), (235, 11780), (236, 11783), (249, 11870), (255, 11915), (256, 11918), (274, 12032), (285, 12125), (287, 12140), (289, 12161), (293, 12194), (296, 12224), (299, 12236), (303, 12275), (308, 12299), (309, 12302), (315, 12326), (320, 12350), (329, 12455), (338, 12503), (342, 12533), (346, 12548), (349, 12563), (352, 12602), (358, 12644), (361, 12668), (363, 12683), (366, 12698), (370, 12713), (376, 12737), (386, 12776), (388, 12791), (389, 12797), (394, 12818), (399, 12842), (401, 12848), (418, 12974), (424, 13004), (428, 13040), (429, 13043), (435, 13091), (439, 13112), (440, 13115), (449, 13187), (456, 13232), (459, 13265), (460, 13286), (471, 13340), (482, 13415), (499, 13499), (511, 13586), (550, 13772), (567, 13904), (573, 13934), (595, 14072), (604, 14123), (608, 14153), (623, 14258), (632, 14309), (636, 14339), (669, 14519), (674, 14570), (681, 14612), (685, 14633), (699, 14729), (707, 14777), (711, 14795), (725, 14918), (731, 14942), (733, 14957), (738, 14987), (742, 15014), (744, 15020), (749, 15053), (756, 15122), (758, 15125), (760, 15161), (771, 15251),

Gene: Yummy_17 Start: 9515, Stop: 14311, Start Num: 74

Candidate Starts for Yummy_17:

(Start: 74 @9515 has 16 MA's), (Start: 81 @9542 has 1 MA's), (83, 9548), (106, 9671), (120, 9773), (125, 9818), (128, 9830), (130, 9848), (132, 9875), (134, 9878), (135, 9893), (141, 9944), (142, 9947), (147, 10004), (149, 10007), (150, 10010), (157, 10049), (161, 10067), (168, 10112), (176, 10148), (180, 10181), (185, 10214), (186, 10226), (194, 10280), (195, 10319), (197, 10334), (199, 10343), (202, 10370), (211, 10421), (221, 10481), (223, 10490), (230, 10544), (240, 10607), (243, 10622), (251, 10685), (268, 10775), (273, 10802), (283, 10895), (285, 10901), (287, 10916), (291, 10955), (301, 11033), (306, 11066), (316, 11105), (319, 11123), (320, 11126), (324, 11153), (327, 11210), (329, 11231), (345, 11342), (350, 11363), (352, 11399), (358, 11441), (359, 11453), (361, 11465), (370, 11510), (371, 11513), (375, 11531), (376, 11534), (377, 11537), (393, 11612), (401, 11645), (409, 11705), (418, 11771), (419, 11774), (420, 11777), (422, 11795), (436, 11894), (439, 11909), (440, 11912), (459, 12062), (460, 12083), (468, 12125), (474, 12152), (475, 12158), (495, 12290), (499, 12302), (511, 12389), (519, 12431), (529, 12467), (538, 12503), (543, 12542), (552, 12593), (557, 12632), (565, 12710), (575, 12761), (585, 12818), (606, 12956), (613, 13028), (636, 13172), (639, 13193), (662, 13370), (663, 13376), (699, 13700), (701, 13706), (711, 13766), (713, 13784), (716, 13817), (725, 13889), (733, 13928), (738, 13958), (749, 14024), (750, 14042), (753, 14072), (760, 14132), (771, 14222), (779, 14282),

Gene: ZAYM_17 Start: 10932, Stop: 16055, Start Num: 20

Candidate Starts for ZAYM_17:

(Start: 20 @10932 has 13 MA's), (22, 10938), (49, 11211), (51, 11220), (57, 11259), (67, 11316), (84, 11379), (99, 11472), (102, 11490), (121, 11643), (129, 11685), (140, 11772), (170, 11964), (171, 11967), (178, 12003), (183, 12051), (198, 12204), (201, 12237), (205, 12246), (207, 12255), (210, 12288), (212, 12300), (215, 12324), (222, 12369), (224, 12378), (233, 12450), (234, 12462), (236, 12480), (258, 12639), (262, 12663), (263, 12672), (264, 12675), (283, 12816), (284, 12819), (285, 12822), (287, 12837), (293, 12891), (298, 12930), (316, 13026), (320, 13047), (322, 13062), (324, 13074), (328, 13146), (353, 13308), (382, 13365), (390, 13377), (391, 13380), (401, 13413), (414, 13506), (415, 13512), (416, 13518), (418, 13539), (419, 13542), (420, 13545), (423, 13566), (427, 13596), (433, 13644), (434, 13650), (436, 13659), (441, 13683), (443, 13698), (444, 13701), (445,

13707), (450, 13752), (452, 13761), (463, 13860), (470, 13902), (476, 13935), (483, 13980), (486, 14004), (491, 14049), (496, 14067), (519, 14205), (525, 14226), (530, 14244), (531, 14247), (534, 14256), (566, 14487), (568, 14505), (574, 14529), (595, 14673), (598, 14697), (607, 14748), (630, 14892), (633, 14910), (637, 14949), (642, 14988), (644, 14994), (646, 15003), (652, 15045), (658, 15123), (664, 15162), (678, 15297), (694, 15390), (695, 15393), (698, 15450), (702, 15459), (704, 15471), (708, 15492), (740, 15705), (747, 15744), (758, 15813), (761, 15867), (782, 16017),

Gene: Zarbodnamra_17 Start: 10273, Stop: 15795, Start Num: 4

Candidate Starts for Zarbodnamra_17:

(Start: 4 @10273 has 38 MA's), (Start: 6 @10288 has 1 MA's), (Start: 7 @10294 has 1 MA's), (Start: 9 @10324 has 1 MA's), (10, 10333), (11, 10336), (13, 10378), (33, 10489), (35, 10510), (56, 10738), (59, 10756), (62, 10771), (63, 10777), (64, 10780), (67, 10798), (73, 10822), (88, 10906), (89, 10909), (98, 10948), (100, 10963), (102, 10972), (124, 11140), (129, 11167), (173, 11455), (178, 11485), (198, 11689), (206, 11734), (209, 11761), (210, 11773), (224, 11863), (229, 11908), (233, 11935), (236, 11965), (249, 12052), (250, 12055), (254, 12094), (267, 12178), (274, 12214), (278, 12256), (283, 12301), (285, 12307), (286, 12319), (287, 12322), (293, 12376), (298, 12415), (300, 12436), (301, 12439), (303, 12457), (304, 12466), (309, 12484), (314, 12505), (316, 12511), (320, 12532), (324, 12559), (329, 12637), (369, 12826), (378, 12850), (384, 12862), (385, 12865), (397, 12880), (400, 12895), (401, 12898), (408, 12949), (419, 13030), (420, 13033), (426, 13066), (429, 13096), (431, 13120), (478, 13453), (486, 13501), (489, 13546), (490, 13549), (492, 13564), (501, 13609), (502, 13618), (503, 13627), (510, 13678), (523, 13750), (528, 13768), (536, 13789), (545, 13888), (546, 13891), (553, 13924), (561, 13990), (562, 14008), (564, 14023), (569, 14056), (577, 14107), (586, 14158), (617, 14401), (618, 14404), (629, 14476), (630, 14479), (638, 14545), (639, 14548), (641, 14566), (649, 14626), (656, 14683), (657, 14701), (666, 14782), (667, 14785), (670, 14800), (686, 14959), (696, 15013), (700, 15079), (701, 15085), (710, 15145), (711, 15151), (725, 15274), (731, 15298), (735, 15316), (738, 15340), (739, 15346), (742, 15367), (749, 15406), (762, 15547), (765, 15559), (772, 15610), (774, 15628), (789, 15778),

Gene: Zareef_18 Start: 10620, Stop: 15749, Start Num: 23

Candidate Starts for Zareef_18:

(18, 10599), (Start: 23 @10620 has 36 MA's), (27, 10647), (40, 10776), (46, 10872), (53, 10923), (65, 10980), (70, 11013), (71, 11016), (87, 11103), (91, 11115), (100, 11163), (101, 11166), (102, 11172), (103, 11175), (109, 11226), (111, 11232), (116, 11280), (126, 11346), (129, 11367), (187, 11760), (188, 11763), (195, 11865), (203, 11922), (205, 11928), (206, 11931), (207, 11937), (209, 11958), (224, 12060), (226, 12087), (236, 12162), (239, 12180), (243, 12198), (246, 12210), (249, 12249), (256, 12297), (263, 12354), (268, 12378), (269, 12384), (285, 12504), (287, 12519), (291, 12558), (300, 12633), (305, 12666), (309, 12681), (310, 12687), (311, 12693), (320, 12729), (330, 12837), (339, 12909), (349, 12963), (361, 13068), (370, 13113), (376, 13137), (385, 13167), (389, 13197), (392, 13209), (393, 13215), (399, 13242), (401, 13248), (414, 13341), (415, 13347), (422, 13398), (431, 13467), (437, 13500), (440, 13515), (441, 13521), (448, 13578), (456, 13632), (458, 13653), (459, 13665), (460, 13686), (461, 13689), (474, 13755), (497, 13896), (511, 13992), (517, 14025), (522, 14058), (532, 14079), (535, 14085), (567, 14322), (573, 14352), (599, 14526), (606, 14556), (608, 14577), (636, 14769), (637, 14778), (661, 14859), (679, 15000), (681, 15006), (699, 15135), (711, 15201), (716, 15252), (725, 15324), (733, 15363), (734, 15366), (738, 15393), (744, 15426), (749, 15459), (758, 15531), (763, 15603), (770, 15657), (772, 15663), (779, 15720),

Gene: ZiggyZoo_16 Start: 10043, Stop: 15586, Start Num: 4

Candidate Starts for ZiggyZoo_16:

(Start: 4 @10043 has 38 MA's), (Start: 6 @10058 has 1 MA's), (Start: 7 @10064 has 1 MA's), (Start: 9 @10094 has 1 MA's), (10, 10103), (11, 10106), (13, 10148), (33, 10259), (35, 10280), (56, 10508), (59, 10526), (62, 10541), (63, 10547), (64, 10550), (67, 10568), (73, 10592), (88, 10676), (90, 10682), (98, 10718), (100, 10733), (102, 10742), (124, 10910), (129, 10937), (143, 11054), (152, 11108), (173, 11225), (178, 11255), (198, 11459), (206, 11504), (209, 11531), (210, 11543), (224, 11633), (229,

11678), (233, 11705), (236, 11735), (249, 11822), (250, 11825), (254, 11864), (274, 11984), (278, 12026), (283, 12071), (285, 12077), (286, 12089), (287, 12092), (293, 12146), (298, 12185), (300, 12206), (301, 12209), (303, 12227), (309, 12254), (314, 12275), (316, 12281), (320, 12302), (324, 12329), (328, 12401), (349, 12536), (369, 12617), (378, 12641), (385, 12656), (400, 12686), (401, 12689), (408, 12740), (419, 12821), (420, 12824), (426, 12857), (429, 12887), (431, 12911), (442, 12977), (478, 13244), (481, 13262), (486, 13292), (489, 13337), (490, 13340), (492, 13355), (493, 13364), (501, 13400), (502, 13409), (503, 13418), (510, 13469), (523, 13541), (528, 13559), (536, 13580), (545, 13679), (546, 13682), (553, 13715), (561, 13781), (562, 13799), (564, 13814), (569, 13847), (577, 13898), (586, 13949), (617, 14192), (618, 14195), (629, 14267), (630, 14270), (638, 14336), (639, 14339), (641, 14357), (649, 14417), (656, 14474), (657, 14492), (666, 14573), (667, 14576), (670, 14591), (686, 14750), (696, 14804), (700, 14870), (701, 14876), (710, 14936), (711, 14942), (716, 14993), (725, 15065), (731, 15089), (735, 15107), (738, 15131), (739, 15137), (742, 15158), (749, 15197), (762, 15338), (765, 15350), (772, 15401), (774, 15419), (789, 15569),

Gene: Zilla_17 Start: 10324, Stop: 15813, Start Num: 4

Candidate Starts for Zilla_17:

(Start: 4 @10324 has 38 MA's), (Start: 6 @10339 has 1 MA's), (Start: 7 @10345 has 1 MA's), (Start: 9 @10375 has 1 MA's), (10, 10384), (11, 10387), (13, 10429), (33, 10540), (35, 10561), (41, 10681), (46, 10723), (56, 10789), (59, 10807), (63, 10828), (64, 10831), (67, 10849), (73, 10873), (88, 10957), (98, 10999), (100, 11014), (102, 11023), (124, 11191), (129, 11218), (143, 11335), (173, 11506), (178, 11536), (198, 11740), (206, 11785), (209, 11812), (210, 11824), (212, 11836), (224, 11914), (229, 11959), (233, 11986), (236, 12016), (249, 12103), (250, 12106), (254, 12145), (274, 12265), (278, 12307), (285, 12358), (287, 12373), (293, 12427), (298, 12466), (300, 12487), (301, 12490), (303, 12508), (309, 12535), (314, 12556), (316, 12562), (320, 12583), (323, 12601), (324, 12610), (365, 12883), (385, 12937), (400, 12967), (401, 12970), (408, 13021), (419, 13102), (420, 13105), (426, 13138), (429, 13168), (431, 13192), (442, 13258), (478, 13525), (486, 13573), (487, 13606), (489, 13618), (490, 13621), (501, 13681), (502, 13690), (503, 13699), (510, 13750), (523, 13822), (528, 13840), (536, 13861), (545, 13960), (546, 13963), (553, 13996), (561, 14062), (562, 14080), (564, 14095), (569, 14128), (577, 14179), (586, 14230), (594, 14299), (617, 14473), (618, 14476), (629, 14548), (630, 14551), (638, 14617), (639, 14620), (641, 14638), (649, 14698), (656, 14755), (657, 14773), (666, 14854), (667, 14857), (670, 14872), (686, 15043), (696, 15097), (706, 15169), (707, 15178), (712, 15214), (720, 15274), (722, 15292), (726, 15310), (737, 15355), (741, 15388), (757, 15499), (762, 15568), (772, 15631), (774, 15649), (789, 15799),